PHILIPS 42PF9966

MODEL

SERVICE MANUAL

Colour television **Chassis**

FTP2.4E

AA

Service Manual FHP plasma panels: 3122 785 14580
Service Manual SDI plasma panels: 3122 785 14990

Service
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Service Manual

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PHILIPS

1. Technical Specifications, Connections, and Chassis Overview

Index of this chapter:

1.1 Technical Specifications
1.2 Connections
1.3 Chassis Overview

Notes:

- Figures can deviate due to the different set executions.
- Specifications are indicative (subject to change).

1.1 Technical Specifications

1.1.1 Vision

Display type	: Plasma, 16:9
Screen size	: 42” (106 cm), FHP
	: 50” (127 cm), SDI
Resolution (HxV pixels)	: 42" - 1024x1024i
	: 50" - 1366x768p
Contrast ratio	: 1000:1
Light output (cd/m^2)	: 42" - 1200
	: 50" - 1000
Viewing angle (HxV degrees)	: 160 x 160
Tuning system	: PLL
Colour systems	: PAL B/G, D/K, I
	: SECAM B/G, D/K, L/L’
Supported computer formats	: 640x480
	: 800x600
	: 1024x768 (50”)
Supported video formats	: 640x480i - 1fH
	: 720x576i - 1fH
	: 640x480p - 2fH
	: 720x576p - 2fH
	: 1920x1080i - 2fH
	: 1920x1152i - 2fH
	: 1280x720p - 3fH
AV (playback only)	: NTSC, PAL, SECAM
Presets/channels	: 100 presets
Tuner bands	: UHF, VHF, S, H-band

1.1.2 Sound

Sound systems	: AV stereo,
	: FM/FM B/G(5.5-5.74),
	: NICAM B/G(5.5-5.85)
	: NICAM D/K(5.5-5.85),
	: NICAM I (6.0-6.52)
Maximum power (W_{RMS})	: 2 x 15

1.1.3 Miscellaneous

Power supply:	
- Mains voltage (V_{AC})	: 220 - 240
- Mains frequency (Hz)	: 50 / 60
Ambient conditions:	
- Temperature range (°C)	: +5 to +40
- Maximum humidity	: 90% R.H.
Power consumption	
- Normal operation (W)	: 42" - 257
	: 50" - 375
- Stand-by (W)	: < 2
Dimensions (WxHxD cm)	: 42" - 111x78x10
	: 50" - 128x88x10
Weight (kg)	: 42" - 42, 50” - 58

1.2 Connections

Note: The following connector colour abbreviations are used (acc. to DIN/IEC 757): Bk= Black, Bu= Blue, Gn= Green, Gy= Grey, Rd= Red, Wh= White, and Ye= Yellow.

1.2.1 Side I/O

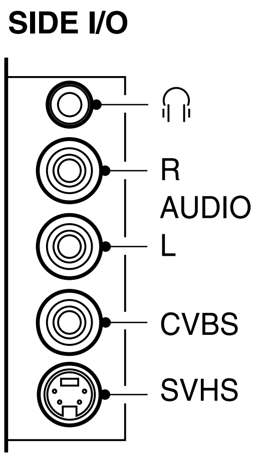

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Figure 1-1 Side I/O connections

Mini Jack: Audio Head phone - Out

Bk	- Head phone	32 - 600 ohm / 10 mW	🎧

Cinch: Video CVBS - In, Audio - In

Ye	- Video CVBS	1 V_{PP} / 75 ohm	⇥◎
Wh	- Audio L	0.5 V_{RMS} / 10 kohm	⇥◎
Rd	- Audio R	0.5 V_{RMS} / 10 kohm	⇥◎

SVHS (Hosiden): Video Y/C - In

1	- Ground Y	Gnd	⏚
2	- Ground C	Gnd	⏚
3	- Video Y	1 V_{PP} / 75 ohm	⇥
4	- Video C	0.3 V_{PP}P / 75 ohm	⇥

1.2.2 Rear Connections

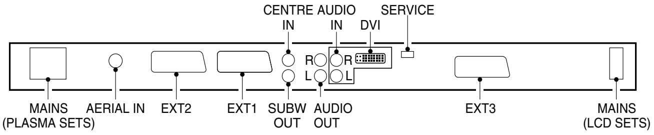

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Figure 1-2 Rear connections

Aerial - In

-	- IEC-type (EU)	Coax, 75 ohm	⏉

EXT2: Video RGB/YC - In, CVBS - In/Out, Audio - In/Out

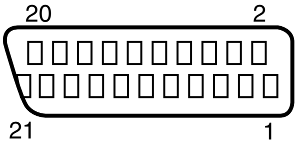

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Figure 1-3 SCART connector

1	- Audio R	0.5 V_{RMS} / 1 kohm	○→
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- Audio L	0.5 V_{RMS} / 1 kohm	○→
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- Vid. Blue-in/C-out	0.7 V_{PP} / 75 ohm	→○○→
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- Easylink P50	0 - 5 V / 4.7 kohm	→○○→
11	- Video Green	0.7 V_{PP} / 75 ohm	→○
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground P50	Gnd	⏚
15	- Video Red/C	0.7 V_{PP} / 75 ohm	→○
16	- FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	→○
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- Video CVBS	1 V_{PP} / 75 ohm	○→
20	- Vid. CVBS/Y-in	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

EXT1: Video RGB-in, CVBS - In/Out, Audio - In/Out

1	- Audio R	0.5 V_{RMS} / 1 kohm	○→
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- Audio L	0.5 V_{RMS} / 1 kohm	○→
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- Video Blue	0.7 V_{PP} / 75 ohm	→○
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- n.c.		
11	- Video Green	0.7 V_{PP} / 75 ohm	→○
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground Data	Gnd	⏚
15	- Video Red	0.7 V_{PP} / 75 ohm	→○
16	- FBL	0 - 0.4 V: INT 1 - 3 V: EXT / 75 ohm	→○
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- Video CVBS	1 V_{PP} / 75 ohm	○→
20	- Video CVBS	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

Cinch: Sub woofer - Out, Centre - In

Bu	- Centre	0.5 V_{RMS} / 10 kohm	→○◎
Bk	- Sub woofer	0.5 V_{RMS} / 10 kohm	○→◎

Cinch: Audio - Out

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	○→◎
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	○→◎

Cinch: DVI Audio - In

Rd	- Audio - R	0.5 V_{RMS} / 10 kohm	→○◎
Wh	- Audio - L	0.5 V_{RMS} / 10 kohm	→○◎

DVI-I: Digital/Analogue Video - In

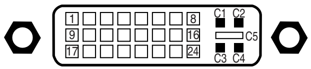

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Figure 1-4 DVI-I connector

1	- D2-		→○
2	- D2+		→○
3	- Shield	Gnd	⏚
4	- D4-		→○
5	- D4+		→○
6	- DDC_SCL	DDC clock	○→
7	- DDC_SDA	DDC data	→○○→
8	- V-sync	0 - 5 V TTL	→○
9	- D1-		→○
10	- D1+		→○
11	- Shield	Gnd	⏚
12	- D3-		→○
13	- D3+		→○
14	- +5V		→○
15	- Ground	Gnd	⏚
16	- HPD	Hot Plug Detect	→○
17	- D0-		→○
18	- D0+		→○
19	- Shield	Gnd	⏚
20	- D5-		→○
21	- D5+		→○
22	- Shield	Gnd	⏚
23	- CLK+		→○
24	- CLK-		→○
C1	- Video Red	0.7 V_{PP} / 75 ohm	→○
C2	- Video Green	0.7 V_{PP} / 75 ohm	→○
C3	- Video Blue	0.7 V_{PP} / 75 ohm	→○
C4	- H-sync	0 - 5 V TTL	→○
C5	- Ground	Gnd	⏚

Service connector (ComPair)

1	- SDA-S	I^2C Data (0 - 5 V)	→○○→
2	- SCL-S	I^2C Clock (0 - 5 V)	→○
3	- Ground	Gnd	⏚

EXT3: Video CVBS - In, Audio - In

1	- n.c.		
2	- Audio R	0.5 V_{RMS} / 10 kohm	→○
3	- n.c.		
4	- Ground Audio	Gnd	⏚
5	- Ground Blue	Gnd	⏚
6	- Audio L	0.5 V_{RMS} / 10 kohm	→○
7	- n.c.		
8	- Function Select	0 - 2 V: INT 4.5 - 7 V: EXT 16:9 9.5 - 12 V: EXT 4:3	→○
9	- Ground Green	Gnd	⏚
10	- n.c.		
11	- n.c.		
12	- n.c.		
13	- Ground Red	Gnd	⏚
14	- Ground Data	Gnd	⏚
15	- n.c.		
16	- n.c.		
17	- Ground Video	Gnd	⏚
18	- Ground FBL	Gnd	⏚
19	- n.c.		
20	- Video CVBS	1 V_{PP} / 75 ohm	→○
21	- Shield	Gnd	⏚

1.3 Chassis Overview

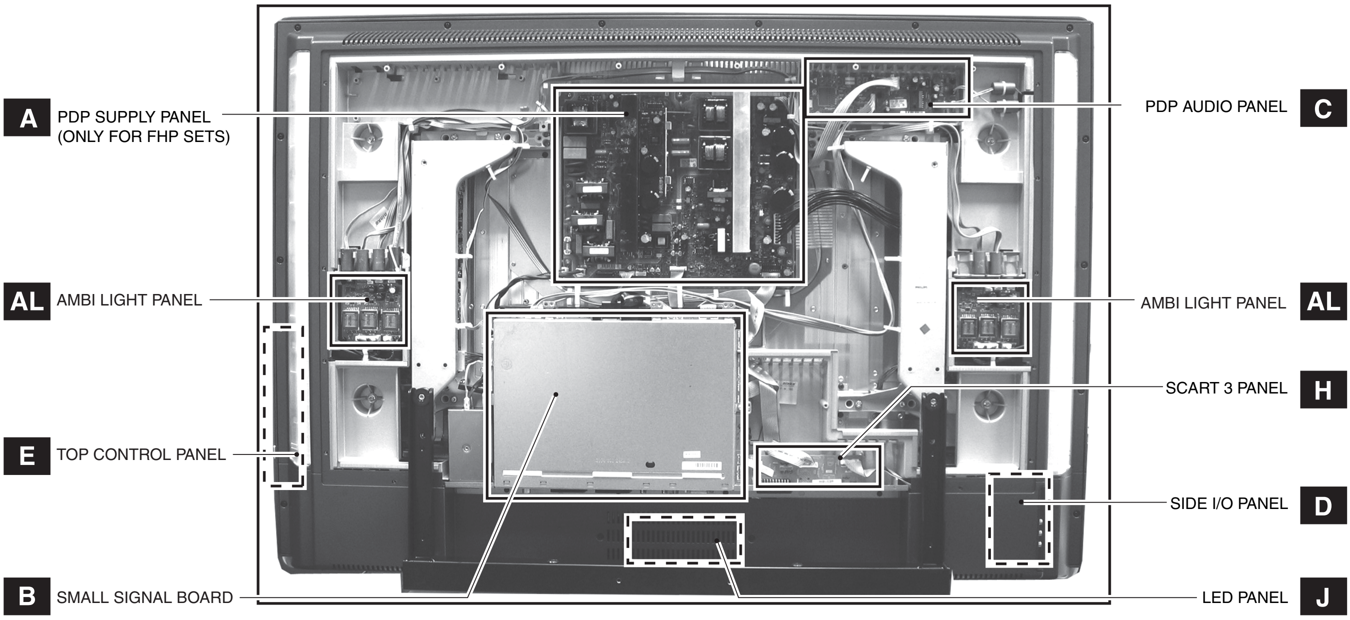
A
PDP SUPPLY PANEL
(ONLY FOR FHP SETS)
AL
AMBI LIGHT PANEL
E
TOP CONTROL PANEL
B
SMALL SIGNAL BOARD
PDP AUDIO PANEL
C
AMBI LIGHT PANEL
AL
SCART 3 PANEL
H
SIDE I/O PANEL
D
LED PANEL
J

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Figure 1-5 PWB location (photo from 42” FHP model)

2. Safety Instructions, Warnings, and Notes

Index of this chapter:

2.1 Safety Instructions
2.2 Warnings
2.3 Notes

2.1 Safety Instructions

Safety regulations require the following **during** a repair:

- Connect the TV to the Mains (AC Power) via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the TV must be returned in its original condition. Pay in particular attention to the following points:

- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains (AC Power) lead for external damage.
- Check the strain relief of the Mains (AC Power) cord for proper function.
- Check the electrical DC resistance between the Mains (AC Power) plug and the secondary side (only for sets that have a Mains (AC Power) isolated power supply):
  1. Unplug the Mains (AC Power) cord and connect a wire between the two pins of the Mains (AC Power) plug.
  2. Set the Mains (AC Power) switch to the "on" position (keep the Mains (AC Power) cord unplugged!).
  3. Measure the resistance value between the pins of the Mains (AC Power) plug and the metal shielding of the tuner or the aerial connection on the TV. The reading should be between 4.5 Mohm and 12 Mohm.
  4. Switch "off" the TV, and remove the wire between the two pins of the Mains (AC Power) plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings

- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ⚠). Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the TV by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
  - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
  - Wristband tester 4822 344 13999.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "on".
- When you align the TV, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground (⏚), or hot ground (⏚), depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).
- Where necessary, measure the waveforms and voltages with (⊤⊤) and without (⊤̸⊤) aerial signal. Measure the voltages in the power supply section both in normal operation (Ⓘ) and in stand-by (⏻). These values are indicated by means of the appropriate symbols.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the “double-D symbol”, are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads (μ= x10^{-6}), nano-farads (n= x10^{-9}), or pico-farads (p= x10^{-12}).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 Rework on BGA (Ball Grid Array) ICs

General

Although (LF)BGA assembly yields are very high, there may still be a requirement for component rework. By rework, we mean the process of removing the component from the PWB and replacing it with a new component. If an (LF)BGA is removed from a PWB, the solder balls of the component are deformed drastically so the removed (LF)BGA has to be discarded.

Device Removal

As is the case with any component that, is being removed, it is essential when removing an (LF)BGA, that the board, tracks, solder lands, or surrounding components are not damaged. To remove an (LF)BGA, the board must be uniformly heated to a temperature close to the reflow soldering temperature. A uniform temperature reduces the risk of warping the PWB.
To do this, we recommend that the board is heated until it is certain that all the joints are molten. Then carefully pull the component off the board with a vacuum nozzle. For the appropriate temperature profiles, see the IC data sheet.

Area Preparation

When the component has been removed, the vacant IC area must be cleaned before replacing the (LF)BGA.
Removing an IC often leaves varying amounts of solder on the mounting lands. This excessive solder can be removed with either a solder sucker or solder wick. The remaining flux can be removed with a brush and cleaning agent.
After the board is properly cleaned and inspected, apply flux on the solder lands and on the connection balls of the (LF)BGA.
Note: Do not apply solder paste, as this has been shown to result in problems during re-soldering.

Device Replacement

The last step in the repair process is to solder the new component on the board. Ideally, the (LF)BGA should be aligned under a microscope or magnifying glass. If this is not possible, try to align the (LF)BGA with any board markers. So as not to damage neighbouring components, it may be necessary to reduce some temperatures and times.

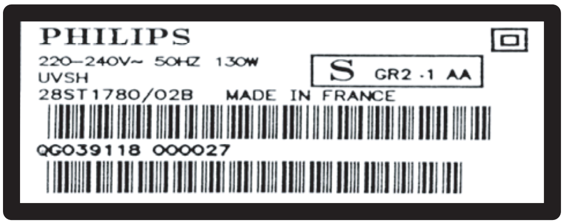
More Information

For more information on how to handle BGA devices, visit this URL: *www.atyourservice.ce.philips.com* (needs subscription, not available for all regions). After login, select “Magazine”, then go to “Workshop Information”. Here you will find Information on how to deal with BGA-ICs.

2.3.4 Lead-free Solder

Philips CE is producing lead-free sets (PBF) from 1.1.2005 onwards.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 1991 week 18).



PHILIPS
220–240V~ 50HZ 130W
UVSH
S GR2 .1 AA
28ST1780/02B MADE IN FRANCE
QG039118 000027

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230205

Figure 2-1 Serial number example

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.

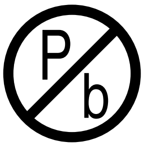

Figure 2-2 Lead-free logo

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
  - To reach a solder-tip temperature of at least 400°C.
  - To stabilise the adjusted temperature at the solder-tip.
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilised at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch “off” unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- Special information for lead-free BGA ICs: these ICs will be delivered in so-called "dry-packaging" to protect the IC against moisture. This packaging may only be opened shortly before it is used (soldered). Otherwise the body of the IC gets "wet" inside and during the heating time the structure of the IC will be destroyed due to high (steam-) pressure inside the body. If the packaging was opened before usage, the IC has to be heated up for some hours (around 90°C) for drying (think of ESD-protection!).
  Do not re-use BGAs at all!
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes.

In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:

- Always use the highest temperature to solder, when using SAC305 (see also instructions below).
- De-solder thoroughly (clean solder joints to avoid the mixing of two alloys).

Caution: For BGA-ICs, you **must** use the correct temperature profile, which is coupled to the 12NC. For an overview of these profiles, visit the website *www.atyourservice.ce.philips.com* (needs subscription, but is not available for all regions).
You will find this and more technical information within the "Magazine", chapter "Workshop information".
For additional questions please contact your local repair help desk.

2.3.5 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages**. While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:
http://www.philips.com/support
http://www.p4c.philips.com

4. Mechanical Instructions

Index of this chapter:

4.1 Cable Dressing
4.2 Service Position
4.3 Assy/PWB Removal
4.4 Plasma Panel / Glass Plate (Dis)Assembly
4.5 Set Re-assembly

Notes:

- Figures below can deviate slightly from the actual situation, due to the different set executions.
- All photo’s are made of the 42” FHP model, however the 50” SDI model will not deviate much from it.
- Follow the disassemble instructions in described order.
- Be aware that the internal (gold coloured) frame is made of conducting material. So, be cautious during electrical measurements!

4.1 Cable Dressing

4.1.1 Chassis

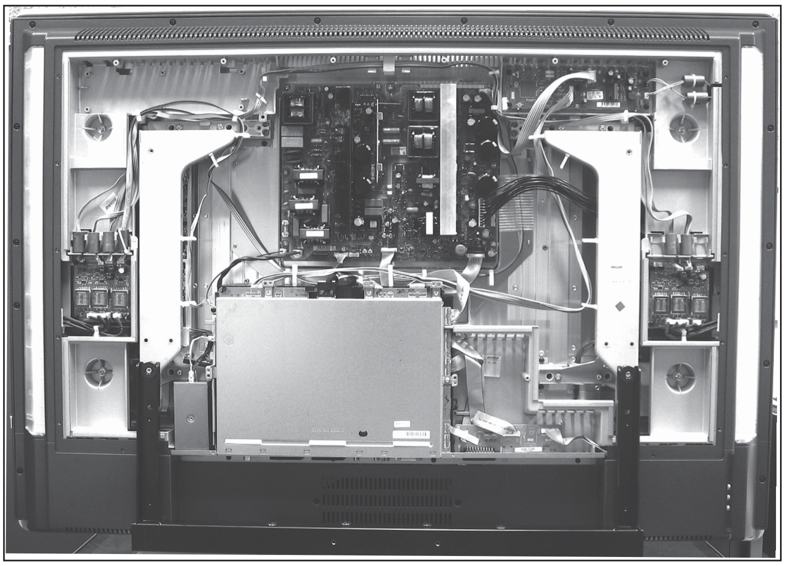

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Figure 4-1 Chassis cable dressing

4.2 Service Position

For easy servicing of this set, there are a few possibilities created:

- The buffers from the packaging.
- Foam bars (created for Service).
- Aluminium service stands (created for Service).

4.2.1 Foam Bars

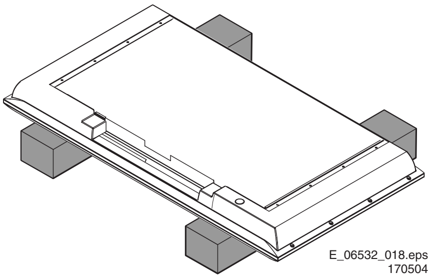

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Figure 4-2 Foam bars

The foam bars (order code 3122 785 90580 for two pieces) can be used for all types and sizes of Flat TVs. By laying the TV face down on the (ESD protective) foam bars, a stable situation is created to perform measurements and alignments.

By placing a mirror under the TV, you can monitor the screen.

4.2.2 Aluminium Stands

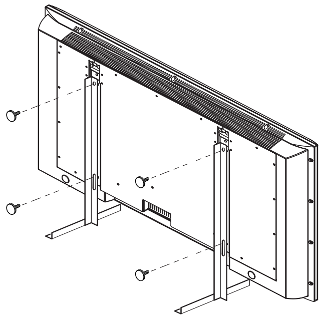

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Figure 4-3 Aluminium stands (MkI)

The new (MkII) aluminium stands (order code 3122 785 90690) can also be used to do measurements, alignments, and duration tests. The stands can be (dis)mounted quick and easy by means of sliding them in/out the "mushrooms".
Important: For (older) FTV sets without these "mushrooms", it is obligatory to use the provided screws, otherwise it is possible to damage the monitor inside!.

4.3 Assy/PWB Removal

4.3.1 Metal Back Plate

Caution: Disconnect the mains power cord before you remove the metal back plate.

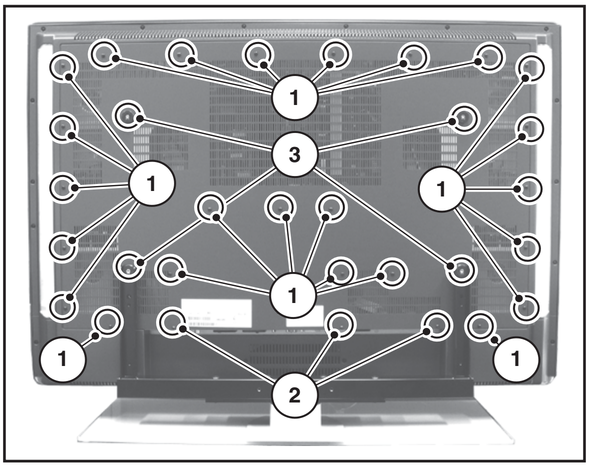

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Figure 4-4 Metal back plate

1. Place the TV set upside down on a table top, using the foam bars (see part "Foam Bars").
   Caution: do **not** put pressure on the display, but let the monitor lean on the speakers or the Front cover.
2. Remove all T10 parker screws (1) from the top, centre, and left and right sides of the back plate.
3. Remove all T10 tapping screws (2) from the bottom of the back plate.
4. Remove the four "mushrooms" (3) from the back plate.
5. Lift the back plate from the TV. Make sure that wires and flat foils are not damaged during the back plate removal.

4.3.2 Rear Cover

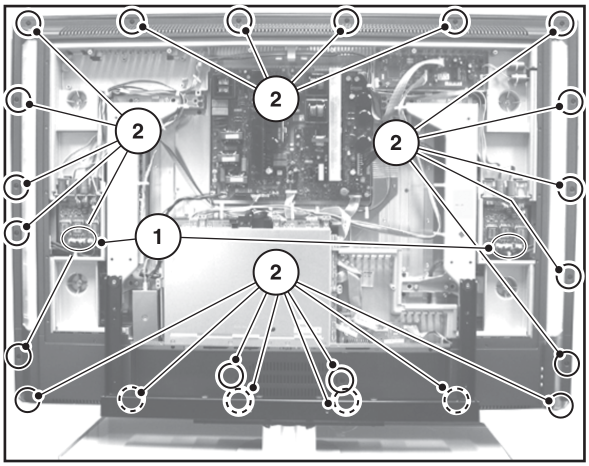

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Figure 4-5 Rear cover

1. Disconnect all connectors (1) at both Ambient Light Inverters that go to the Ambient Lights in the rear cover.
2. Remove all T10 tapping screws (2) around the edges of the rear cover.
3. Lift the rear cover from the TV.

4.3.3 Ambient Light Panel(s)

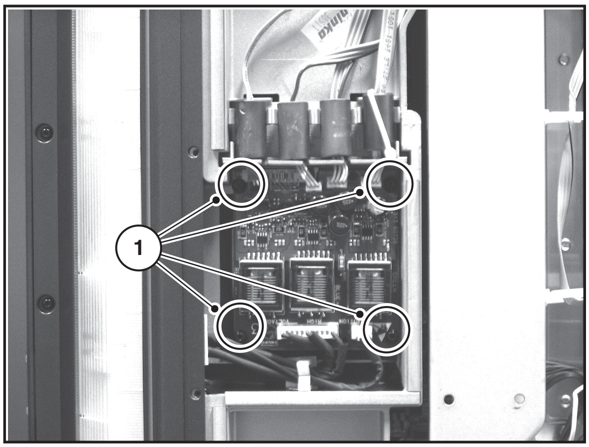

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Figure 4-6 Ambient light inverter (left side)

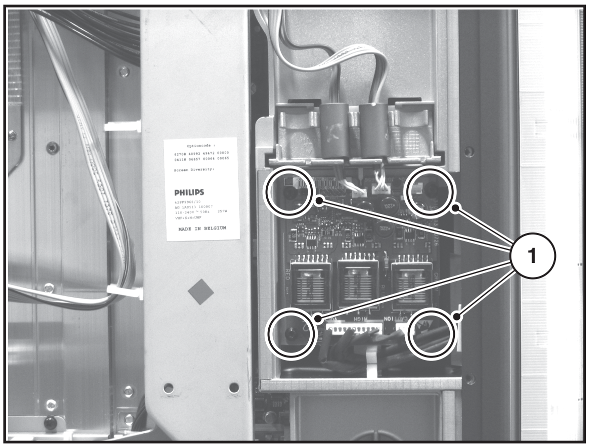

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Figure 4-7 Ambient light inverter (right side)

Later models are equipped with two Ambient Light Inverter panels. For the earlier models with one panel, reference is made to the FTP2.2x Service Manual for the correct mechanical instructions.

1. Disconnect all cables from the Ambient Light Inverter panel.
2. Remove all mounting screws (1) from the Ambient Light Inverter panel.
3. Take out the Ambient Light Inverter panel.

4.3.4 Power Supply Panel

1. Disconnect all cables from the Power Supply panel.
2. Remove all mounting screws from the Power Supply panel.
3. Take out the Power Supply panel.

4.3.5 SCART3 Panel

1. Disconnect all cables from the SCART3 panel.
2. Remove the two mounting screws (7) near the SCART3 at the connector plate (see figure "Connector plate").
3. Take out the SCART3 panel.

4.3.6 Audio Panel

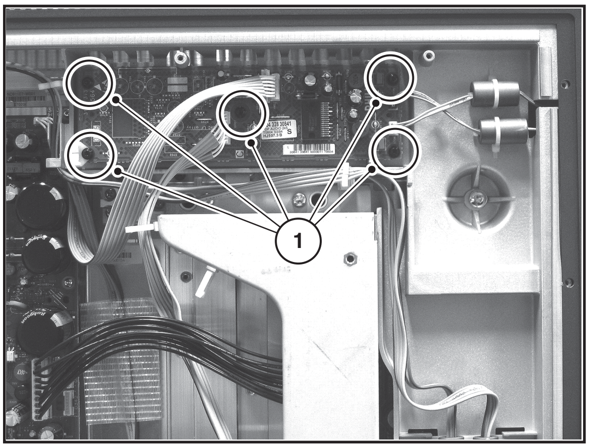

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Figure 4-8 Audio panel

1. Disconnect all cables from the Audio panel.
2. Remove all mounting screws (1) from the Audio panel.
3. Take out the Audio panel.

4.3.7 Side I/O Panel

1. Disconnect the cable from the Side I/O panel.
2. Release the clamps and take out the Side I/O panel from its bracket.

4.3.8 Top / Side Control

1. Remove the mounting screws from the Top / Side Control panel bracket.
2. Disconnect the cable.
3. Release the clamps and take out the Top / Side Control panel.

4.3.9 LED Panel

1. Disconnect all cables from the LED panel.
2. Remove the mounting screws from the LED panel.
3. Take out the LED panel.

4.3.10 Speakers

1. Remove all mounting screws.
2. After removing the cover plate, you can access the speakers.
3. Be sure that the foam that makes the unit airtight is not damaged.

4.3.11 SSB

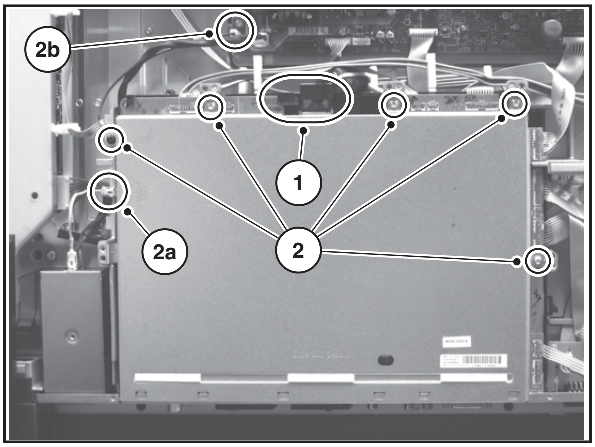

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Figure 4-9 SSB top shielding

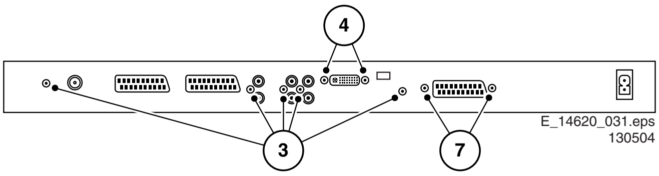

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Figure 4-10 Connector plate

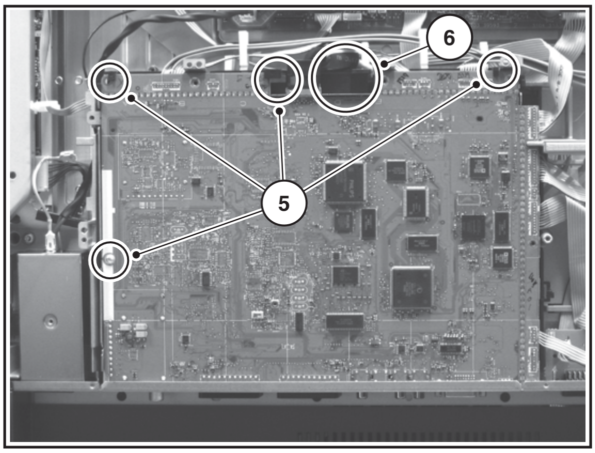

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Figure 4-11 SSB removal

1. Remove the LVDS locking bracket (1).
2. Remove all fixing screws (2).
3. Disconnect the grounding wire from the mains filter (2a).
4. Shift, and lift the shielding at the top. The panel hinges at the SCART side.
   Caution: do **not** damage the EMC shielding foam while you remove the shielding.
5. Remove mounting screws (3) from the connector plate. Use a 5 mm socket screwdriver to remove both DVI connector distance bolts (4).
6. Remove the mounting screws from the SSB (5).
7. Disconnect the LVDS cable (6).
8. Lift the SSB, disconnect all cables, and take out the SSB.

4.3.12 Ambient Lights

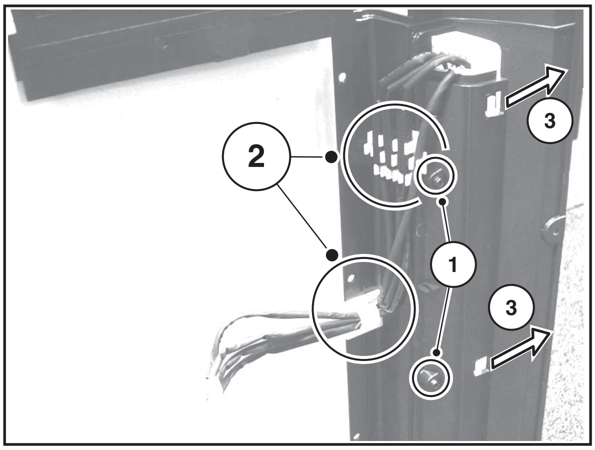

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Figure 4-12 Ambient light (partly shown)

Ambient lights are located in the rear cover of the TV.

1. Unplug the connectors.
2. Remove all mounting Ambient Light screws (1).
3. Move the Ambient light unit to the side (3) and take out the unit.

4.4 Plasma Panel / Glass Plate (Dis)Assembly

Important: Be sure to work in a dust free environment during the following activities. In addition, the use of (fabric) hand gloves is advised.

4.4.1 Plasma Display Panel

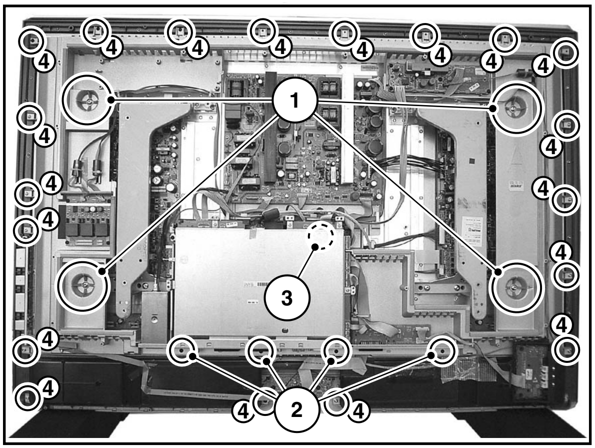

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Figure 4-13 Plasma panel removal

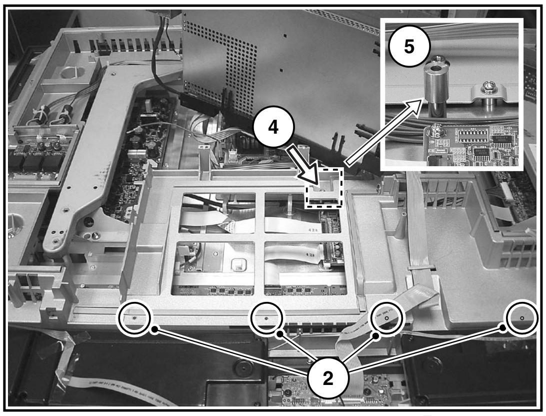

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Figure 4-14 Hidden screw

Disassembly

1. Place the TV set face down on the foam bars. Place the bars at the edges of the TV so they will support the front frame, and not only the glass plate!
2. Remove the four T25 screws (1) that hold the plasma panel.
   Note: In some models, the upper left T25 screw is hidden under the Ambient Light Inverter panel. Remove this panel to get access to it.
3. Remove the **fifth** T25 screw that is located near the SSB.
   Note: In some models, this fifth screw is hidden **under** the SSB. To get access, you have to remove the four T10 screws (2) that mount the "SSB connector plate" to the frame. Then, lift the complete SSB unit away, so you can remove the hidden screw (4).
4. Remove all T10 tapping screws around the frame (4).
5. Next step is to unplug the following connectors (see also Wiring Diagram in chapter 6):
   - Mains plug on PSU.
   - Audio panel supply plug on PSU.
   - LVDS plug on SSB (first remove the fixation clamp).
   - Ambilight supply plug on PSU.
   - SSB supply plugs on PSU.
   - Side/Top Control plug on LED panel.
   - Side I/O plug on LED panel.
   - SSB grounding wire.
   - Loosen all necessary cables from their clamps.
6. Lift the plastic frame together with all PWBs from the PDP panel.
7. Now the PDP (incl. the PSU panel) can be removed. Lift the panel at the two metal bars from the glass plate.
8. Before sending the plasma panel to the NSO for repair or exchange, remove the PSU panel **and the spacer** (5) that is placed upon the centre mounting stud.

Assembly

In order to centre the (new) plasma panel correctly w.r.t. the glass plate, do the following:

1. Place the (new) plasma panel face down on foam bars.
2. Also, place the front assy (front panel with glass plate) on two other foam bars.
3. Mount the plastic frame on the plasma panel.
   Important: Be sure that the spacer (order code 3104 301 62781) is placed upon the centre mounting stud (5).
4. Lift this module (frame and PDP) and place it onto the front assy.
5. Now follow the above described disassembly process in reverse order.

4.4.2 Glass Plate

1. Follow the above-described PDP disassembly instructions.
2. After removing the PDP, the glass plate is now accessible.

4.5 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Note: While re-assembling the TV, make sure that:

- All cables are placed and connected in their original position (see figure “Cable dressing”).
- EMC Shielding foam is intact.
- LVDS connector (SSB) is secured with plastic clamp.
- All "grounding" wires are re-connected:
  - Between metal speaker grid and frame (near the LED panel).
  - Between the Mains Filter and the SSB Top Shielding (see figure SSB Top shielding item 2a).
  - Between the SSB Top Shielding and the PSU (see figure SSB Top shielding item 2b).

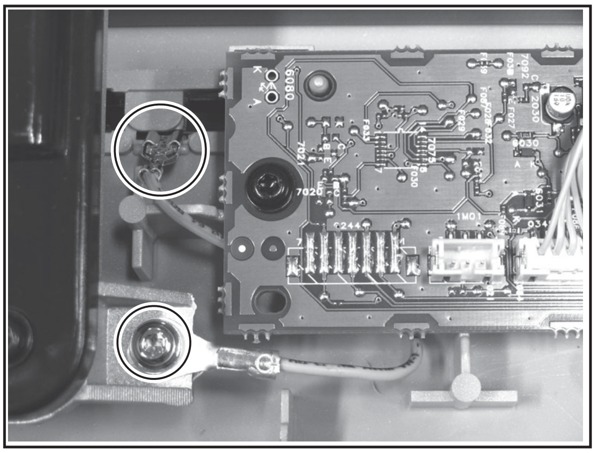

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Figure 4-15 Grounding wire of metal speaker grid

5. Service Modes, Error Codes, and Fault Finding

Index of this chapter:

5.1 Test Points
5.2 Service Modes
5.3 Problems and Solving Tips (related to CSM)
5.4 ComPair
5.5 Error Codes
5.6 The Blinking LED Procedure
5.7 Protections
5.8 Repair tips
5.9 Software Downloading

5.1 Test Points

The chassis is equipped with test points printed on the circuit board assemblies.

Perform measurements under the following conditions:

- Service Default Mode.
- Video: colour bar signal.
- Audio: 3 kHz left, 1 kHz right.

5.2 Service Modes

Service Default Mode (SDM) and Service Alignment Mode (SAM) offer several features for the service technician, while the Customer Service Mode (CSM) is used for communication between a Philips Customer Care Centre (P3C) and a customer.

There is also the option of using ComPair, a hardware interface between a computer (see requirements below) and the TV chassis. It offers the ability of structured troubleshooting, test pattern generation, error code reading, software version read-out, and software upgrading.
Minimum requirements: a Pentium processor, Windows 95/98, and a CD-ROM drive (see also paragraph “ComPair”).

Remark: The silk screen printing is not correct for the SAM/SDM indication. For the correct location of these pins, see figure ”Service pads”.

5.2.1 Service Default Mode (SDM)

Purpose

- To create a pre-defined setting, to get the same measurement results as given in this manual.
- To override SW protections.
- To start the blinking LED procedure.

Specifications

Table 5-1 SDM default settings

Region	Freq. (MHz)	Default system
Europe, AP-PAL/Multi	475.25	PAL B/G
NAFTA, AP-NTSC, LATAM	61.25 (ch. 3)	NTSC M

- All picture settings at 50% (brightness, colour, contrast).
- All sound settings at 50%, except volume at 25%.
- All service-unfriendly modes (if present) are disabled, like:
  - (Sleep) timer.
  - Child/parental lock.
  - Blue mute.
  - Automatic volume limiter (AVL).
  - Auto switch-off (when no video signal was received for 10 minutes).
  - Skip/blank of non-favourite pre-sets.
  - Smart modes.
  - Auto store of personal presets.
  - Auto user menu time-out.

How to activate SDM
Use one of the following methods:

- Use the standard RC-transmitter and key in the code **“062596”**, directly followed by the “MENU” button.
  Note: It is possible that, together with the SDM, the main menu will appear. To switch it off, push the “MENU” button again.

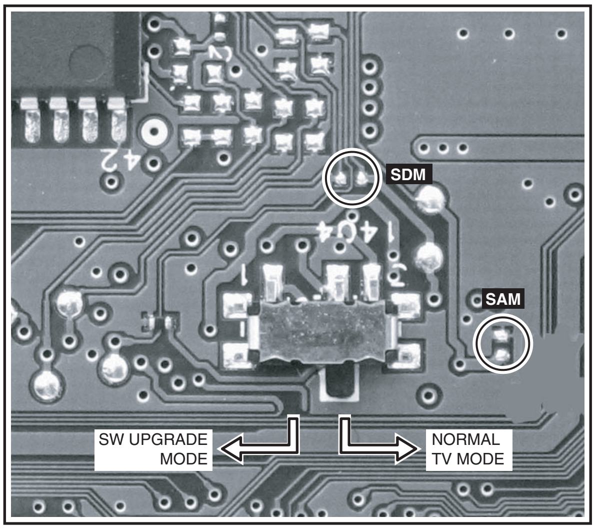

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Figure 5-1 Service pads

- Short for a moment the two solder pads on the SSB, with the indication “SDM” (see figure ”Service pads”). Activation can be performed in all modes, except when the TV has a problem with the main microprocessor.
  Caution: If the SDM is activated via the pins, all the software-controlled protections are de-activated.
- Use the DST-emulation feature of ComPair.
- Use the “DEFAULT” button on the Dealer Service Tool (RC7150).

How to navigate
When you press the “MENU” button on the RC transmitter, the TV will toggle between the SDM and the normal user menu (with the SDM mode still active in the background).

How to exit SDM
Use one of the following methods:

- Switch the TV to STANDBY via the RC-transmitter.
- Press the “EXIT” button on the DST.
- Via a standard customer RC-transmitter: key in “00”-sequence.

5.2.2 Service Alignment Mode (SAM)

Purpose

- To perform (software) alignments.
- To change option settings.
- To easily identify the used software version.
- To view operation hours.
- To display (or clear) the error code buffer.

Specifications

- Operation hours counter.
- Software version.

- Option settings.
- Error buffer reading and erasing.
- Software alignments.

How to activate SAM

Use one of the following methods:

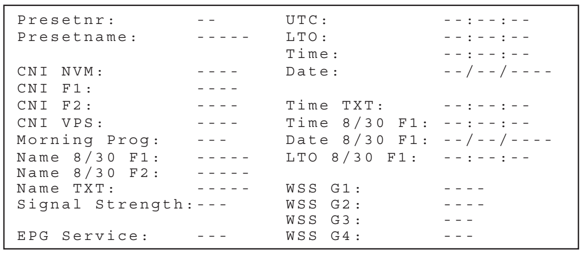
- Via a standard RC transmitter: key in the code **“062596”** directly followed by the “OSD [i+]” button. After activating SAM with this method a service warning will appear on the screen, you can continue by pressing any digit key on the RC.
- Short for a moment the two solder pads on the SSB with the indication "SAM" (see figure ”Service pads”). Depending on the software version, it is possible that a service warning will appear. You can continue by pressing any digit key on the RC.
- Use the DST-emulation feature of ComPair.
- Press the ALIGN button on the DST while the TV is in the normal operation

After activating this mode, “SAM” will appear in the upper right corner of the screen.

Contents of SAM:

- **Operation Hours.** Displays the accumulated total of operation hours (not the stand-by hours).
- **Hardware Info.**
  - **ROM Version.** Displays the date of the software and the software version of the ROM
    Ex.: TX24EU_1.0_01234 = AAAABB_X.Y_NNNNN.
    - **AAAA**= the chassis name.
    - **BB**= the region: EU= Europe, AP= Asia Pacific PAL/Multi, AN= Asia Pacific NTSC, US= USA, LT= LATAM.
    - **X.Y**= the software version, where X is the main version number (different numbers are not compatible with one another) and Y is the sub version number (a higher number is always compatible with a lower number).
    - **NNNNN**= last five digits of 12nc code software.
  - **FBX Version.** Displays the software version of the FBX
  - **SW VERSION EPLD**. Displays the software version of the EPLD.
- **Errors.** (followed by maximal 10 errors). The most recent error is displayed at the upper left (for an error explanation see paragraph “Error Codes”).
- **Defective Module.** Here the module that generates the error is displayed. If there are multiple errors in the buffer, which are not all generated by a single module, there is probably another defect. It will then display the message “UNKNOWN” here.
- **Reset Error Buffer.** When you press the “OK” button, the error buffer is reset.
- **Alignments.** This will activate the “ALIGNMENTS” sub-menu.
- **Dealer Options.** Extra features for the dealers.
- **Service Options.** Extra features for Service.
- **Initialise NVM.** When an NVM was corrupted (or replaced) in the former EM3 chassis, the microprocessor replaces the content with default data (to assure that the TV can operate). However, all pre-sets and alignment values are gone now, and option numbers are not correct. Therefore, this was a very drastic way. In this chassis, the procedure is implemented in another way: The moment the processor recognises a corrupted NVM, the “initialise NVM” line will be highlighted. Now, you can do two things (dependent of the service instructions at that moment):
  - Save the content of the NVM via ComPair for development analysis, **before** initialising. This will give the Philips Service department an extra possibility for diagnosis (e.g. when Development asks for this).
  - Initialise the NVM (same as in the past, however now it happens conscious).
- **Store.** All options and alignments are stored when pressing the “OK”-button
- **Functional Test.** All devices are tested via the “OK” button. Eventual errors are displayed in the error buffer. The error buffer is not erased, the content returns when this test is terminated.
- **Daily Menus.** With the “OK” button, you can go to the normal user menu. SAM is still active in the background. With the “MENU” button, you return from the user menu to SAM menu. This feature can be helpful to quickly change some settings in the user menu.
- **SW Maintenance.**
  - **Upgrade.** More info see paragraph Software downloading.
  - **Events.** Not useful for service purposes. In case of specific software problems, the development department can ask for this info.
  - **BDM Info.** Broadcast Debug Menu info. The purpose of this menu is to debug the broadcast, **not** the TV. The menu gives an overview of what is received on the current preset.

Following items are displayed:



```
Presetnr:       --      UTC:          --:--:--
Presetname:     -----   LTO:          --:--:--
                        Time:         --:--:--
CNI NVM:        ----    Date:         --/--/----
CNI F1:         ----
CNI F2:         ----    Time TXT:     --:--:--
CNI VPS:        ----    Time 8/30 F1: --:--:--
Morning Prog:   ---     Date 8/30 F1: --/--/----
Name 8/30 F1:   -----   LTO 8/30 F1:  --:--:--
Name 8/30 F2:   -----
Name TXT:       -----   WSS G1:       ----
Signal Strength:---     WSS G2:       ----
                        WSS G3:       ---
EPG Service:    ---     WSS G4:       ---
```

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Figure 5-2 Broadcast debug menu overview

Table 5-2 Broadcast debug menu explanation

Item	Source	Description
Presetnr	Set	Preset number of the current selected preset.
Presetname	Set	Preset name of the current selected preset.
CNI NVM	Broadcaster	CNI number stored in NVM for the current preset.
CNI F1	Broadcaster	CNI number from transmitted Packet 8/30 Format 1.
CNI F2	Broadcaster	CNI number from transmitted Packet 8/30 Format 2.
CNI VPS	Broadcaster	CNI number from transmitted VPS line.
Morning Prog	Broadcaster	"ARD" or "ZDF" according to dedicated bit in 8/30 Format 1.
Name 8/30 F1	Broadcaster	Name extracted from status message of 8/30 Format 1.
Name 8/30 F2	Broadcaster	Name extracted from status message of 8/30 Format 2.
Name TXT	Broadcaster	Name extracted from TXT header.
Signal Strength	FBX	Noise figure measured for selected preset.
EPG Service	Set	EPG Service stored in NVM for current preset displayed as "TXT", "MCP", "SCP", "OCP".
UTC	Set	UTC (Universal Time Code formerly known as Greenwich Mean Time) used in the TV.
LTO	Set	LTO (Local Time Offset) used in the TV. Used by EPG for all NextView displays. (= Time TXT header - Time 8/30 F1)
Time	Set	Current time running in the TV. Was extracted at start-up, then maintained by software.
Date	Set	Current date running in the TV. Was extracted at start-up, then maintained by software.
Time TXT	Broadcaster	TXT header time from the selected preset.
Time 8/30 F1	Broadcaster	UTC time from 8/30 Format 1.
Date 8/30 F1	Broadcaster	Date from 8/30 Format 1.
LTO 8/30 F1	Broadcaster	LTO from 8/30 Format 1.
WSS G1	Broadcaster	WSS Group 1 (Aspect Ratio) bits 0 1 2 3
WSS G2	Broadcaster	WSS Group 2 (Enhanced Services) bits 4 5 6 7

Item	Source	Description
WSS G3	Broadcaster	WSS Group 3 (Subtitles) bits 8 9 10
WSS G4	Broadcaster	WSS Group 4 (Reserved) bits 11 12 13

How to navigate

- In SAM, you can select the menu items with the “CURSOR UP/DOWN” key on the RC-transmitter. The selected item will be highlighted. When not all menu items fit on the screen, move the “CURSOR UP/DOWN” key to display the next/previous menu items.
- With the “CURSOR LEFT/RIGHT” keys, it is possible to:
  – (De) activate the selected menu item.
  – Change the value of the selected menu item.
  – Activate the selected sub-menu.

How to exit SAM

Use one of the following methods:

- Press the “MENU” button on the RC-transmitter, or
- Switch the TV to STANDBY via the RC-transmitter, or
- Press the “EXIT” button on the DST.

5.2.3 Customer Service Mode (CSM)

Purpose

When a customer is having problems with his TV-set, he can call his dealer. The service technician can than ask the customer to activate the CSM, in order to identify the status of the TV. Now, the service technician can judge the severity of the complaint. In many cases, he can advise the customer how to solve the problem, or he can decide if it is necessary to visit the customer.
The CSM is a read only mode; therefore, modifications in this mode are not possible.

How to activate CSM

Use the following method:
Key in the code **“123654”** via the standard RC transmitter.

Note: Activation of the CSM is only possible if there is no (user) menu on the screen!

How to navigate

By means of the “CURSOR-DOWN/UP” knob on the RC-transmitter, you can navigate through the menus.

Contents of CSM

CUSTOMER SERVICE MENU 1

- **Software Version (example: TX24EU_1.0_01234).** Displays the built-in software version. In case of field problems related to software, software can be upgraded (for more details, see paragraph Software downloading). You will find details of the software versions in the chapter “Software Survey” of the “Product Survey - Colour Television” publication. This publication is generated four times a year.
- **Feature Box**. The 12NC-number of the built-in Feature Box software.
- **Set Type.** This information is very helpful for a help desk/ workshop as reference for further diagnosis. In this way, it is not necessary for the customer to look at the rear of the TV-set.
- **Code 1.** Gives the latest five errors of the error buffer. As soon as the built-in diagnose software has detected an error the buffer is adapted. The last occurred error is displayed on the left most position. Each error code is displayed as a 3-digit number. When less than 10 errors occur, the rest of the buffer is empty (000). See also paragraph Error Codes for a description.
- **Code 2.** Gives the first five errors of the error buffer. See also paragraph Error Codes for a description.
- **Volume.** Gives the last status of the volume as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Volume values can be changed via the volume key on the RC-transmitter.
- **Brightness.** Gives the last status of the brightness as set by the customer. The value can vary from 0 (brightness is minimum) to 100 (brightness is maximum). Brightness values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “BRIGHTNESS”.
- **Contrast.** Gives the last status of the contrast as set by the customer. The value can vary from 0 (contrast is minimum) to 100 (contrast is maximum). Contrast values can be changed via “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “CONTRAST”.
- **Colour.** Gives the last status of the colour saturation, as set by the customer. The value can vary from 0 (colour is minimum) to 100 (colour is maximum). Colour values can be changed via “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “COLOUR”.
- **Hue.** Only relevant for NTSC-signals (e.g. some NTSC-DVD-discs).

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- **Sharpness.** Gives the sharpness value. The value can vary from 0 (sharpness is minimum) to 7 (sharpness is maximum). In case of bad antenna signals, a too high value of the sharpness can result in a noisy picture. Sharpness values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “PICTURE” and “SHARPNESS”.
- **Headphone Volume.** Gives the last status of the head phone volume, as set by the customer. The value can vary from 0 (volume is minimum) to 100 (volume is maximum). Head phone volume values can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys on the RC-transmitter after pressing the “MENU” button and selecting “SOUND” and “HEADPHONE VOLUME”.
- **Dolby.** Indicates whether the received transmitter transmits Dolby sound (“ON”) or not (“OFF”). Attention: The presence of Dolby can only be tested by the software on the Dolby Signalling bit. If a Dolby transmission is received without a Dolby Signalling bit, this indicator will show “OFF” even though a Dolby transmission is received.
- **Surround Mode.** Indicates the by the customer selected surround mode (or automatically chosen mode). Possible values are “OFF”, “INCREDIBLE SURROUND” OR “DOLBY VIRTUAL”. These settings can be influenced after pressing the “MENU” button and selecting “SOUND” and SURROUND MODE”. It can also have been selected automatically by signalling bits (internal software).
- **Tuner Frequency.** Indicates the frequency the selected transmitter is tuned to. The tuner frequency can be changed via the “CURSOR LEFT” and “CURSOR RIGHT” keys for fine tune after opening the installation menu and selecting “INSTALL” and “MANUAL INSTALL”.
- **Digital Option.** Gives the selected digital mode, “PROGRESSIVE SCAN”, “MOVIE PLUS” or “PIXEL PLUS”. Change via “MENU”, “PICTURE”, “DIGITAL OPTIONS”.
- **Centre Trim.** Not applicable for this set.
- **TV System.** Gives information about the video system of the selected transmitter.
  – BG: PAL BG signal received.
  – DK: PAL DK signal received.
  – I: PAL I signal received.
  – L/La: SECAM L/La signals received.
  – M: NTSC M signal received with video carrier on 38.9 MHz.

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- **Balance.** Indicates the balance settings, between “-50” and “+50”. Change via “MENU”, “SOUND”, and “BALANCE”. Not applicable for Dolby Pro Logic sets.
- **Centre Mode.** Not applicable for this TV.
- **DNR.** Gives the selected DNR setting (Dynamic Noise Reduction), “OFF”, “MINIMUM”, “MEDIUM”, or “MAXIMUM”. Change via “MENU”, “PICTURE”, “DNR”
- **Noise Figure.** Gives the noise ratio for the selected transmitter. This value can vary from 0 (good signal) to 127 (average signal) and to 255 (bad signal). For some software versions, the noise figure will only be valid when “Active Control” is set to “medium” or “maximum”.
- **Source.** Indicates which source is used and the video/ audio signal quality of the selected source.
  Example: Tuner, Video/NICAM) Source: “TUNER”, “EXT1”, “EXT2”, “EXT3”, “EXT4”, “SIDE”, “AV1”, “AV2”, “AV3” or “AV4”. Video signal quality: “VIDEO”, “S-VIDEO”, “RGB 1FH”, “YPBPR 1FH 480P”, “YPBPR 1FH 576P”, “YPBPR 1FH 1080I”, “YPBPR 2FH 480P”, “YPBPR 2FH 576P”, “YPBPR 2FH 1080I”, “RGB 2FH 480P”, “RGB 2FH 576P” or “RGB 2FH 1080I”. Audio signal quality: “STEREO”, “SPDIF 1”, “SPDIF 2”, or “SPDIF”.
- **Audio System.** Gives information about the audio system of the selected transmitter: “ANALOGUE MONO”, “ANALOGUE STEREO”, “PCM 2/0”, “DD 1/0”, “DD 2/0 LtRt”, “DD 2/0 L0R0”, “DD 2/1”, “DD 2/2”, “DD 3/0”, “DD 3/1”, “DD 3/2”, “DD 1+1”, “MPEG 1/0”, “MPEG 2/0”, “MPEG 2/0 LtRt”, “MPEG 2/1”, “MPEG 2/2”, “MPEG 3/0”, “MPEG 3/1”, “MPEG 3/2”, “MPEG 1+1” or “MPEG 2+2”.
- **Tuned Bit.** Gives information about the tuning method of the stored pre-set. If a channel is found via “automatic installation”, you will see the value “YES”. When you change this (automatically found) frequency via “fine tune” adjustment (installation menu - manual installation), the displayed value will change to “NO”. Therefore, when you see the value “NO” in this line, it is an indication that the received channel is a non-standard signal (e.g. of a VCR).
- **Surround Speakers.** Not applicable in this set.
- **On Timer.** Indicates if the “On Timer” is set “ON” or “OFF” and if the timer is “ON” also displays start time, start day and program number. Change via “MENU”, “TV”, “FEATURES”, and “ON TIMER”.
- **Preset Lock.** Indicates if the selected preset has a child lock: “LOCKED” or “UNLOCKED”. Change via “MENU”, “TV”, “FEATURES”, “CHILD LOCK”, and “CUSTOM LOCK”.

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- **Child Lock.** Indicates the last status of the general child lock: “UNLOCK”, “LOCK”, or “CUSTOM LOCK”. Change via “MENU”, “TV”, “FEATURES”, “CHILD LOCK”, and “LOCK”.
- **Age Lock.** Indicates the last status of the EPG rating for child lock: “OFF”, “4 YEARS”, “6 YEARS”, “8 YEARS”, “10 YEARS”, “12 YEARS”, “14 YEARS” or “16 YEARS”. This is only displayed if child lock is set to “CUSTOM LOCK”
- **Lock After.** Indicates at what time the child lock is set: “OFF” or e.g. “18:45” (lock time). This is only displayed if child lock is set to “CUSTOM LOCK”
- **Category Lock.** Indicates the last status of the EPG theme child lock: “MOVIES”, “NEWS”, “SHOWS”, “SPORTS”, “CHILDREN”, “MUSIC”, “CULTURE”, or “SERIES”. This is only displayed if child lock is set to “CUSTOM LOCK”. It is possible that more than one value is shown.
- **Program Category.** Indicates the theme of the selected transmitter: “MOVIES”, “NEWS”, “SHOWS”, “SPORTS”, “CHILDREN”, “MUSIC”, “CULTURE”, or “SERIES”.
- **TV Ratings Lock.** Only applicable for US.
- **Movie Ratings Lock.** Only applicable for US.
- **V-Chip TV Status.** Only applicable for US.

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- **V-Chip Movie Status.** Only applicable for US.
- **Options 1.** Gives the option codes of option group 1 as set in SAM (Service Alignment Mode).
- **Options 2.** Gives the option codes of option group 2 as set in SAM (Service Alignment Mode).
- **AVL.** Indicates the last status of AVL (Automatic Volume Level): “ON” or “OFF”. Change via “MENU”, “TV”, “SOUND”, “AVL”
- **Delta Volume.** Indicates the last status of the delta volume for the selected preset as set by the customer: from “-12” to “+12”. Change via “MENU”, “TV”, “SOUND”, “DELTA VOLUME”.
- **Front Spkr Dist.** Not applicable for this TV.
- **Front Spkr Dist.** Not applicable for this TV.

How to exit CSM

Use one of the following methods:

- After you press a key on the RC-transmitter (with exception of the “CHANNEL”, “VOLUME” and digit (0-9) keys), or
- After you switch the TV-set “OFF” with the mains switch.

Note: When you de-activate CSM, it is possible (depending on the software version) that the size of the picture changes. This can be solved by pushing “P+” and then “P-”.

5.3 Problems and Solving Tips (related to CSM)

Note: Below described problems are all related to the TV settings (visible in the CSM menu). The procedures to change the value (or status) of the different settings are described above. New value(s) are automatically stored.

5.3.1 Picture Problems

Snowy/noisy picture

1. Check in CSM line NOISE FIGURE. In case the value is "127" or higher, and the value is also high on other programs, check the aerial cable/aerial system. For some software versions, the noise figure will only be valid when “Active Control” is set to “medium” or “maximum”.
2. Check in CSM lines SHARPNESS and NOISE FIGURE. In case the value of line SHARPNESS is "3" or "4" and the value of line NOISE FIGURE is high ("127" or higher), decrease the "Sharpness” value.

Picture too dark

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, increase the “Brightness” or the “Contrast” value. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM line BRIGHTNESS and CONTRAST. If the value of these lines is low (< "10"), increase the “Brightness” or the “Contrast” value via the user menu.

Picture too bright

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, decrease the “Brightness” or the “Contrast” value. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM lines BRIGHTNESS and CONTRAST. If the value of these line is high (> 50), decrease the “Brightness” value or increase the “Contrast” value via the user menu.

White line around picture elements and text

1. Press “Menu”, “TV”, “Picture”, “Smart Picture”. In case the picture improves, decrease the “Sharpness” value. The new value is automatically stored (in “personal” pre-set) for all TV channels.
2. Check in CSM line “Sharpness”. If the value is high, decrease it. The new value is automatically stored for all TV channels.

No picture

Check in CSM line TUNED BIT. In case the value is “No”, install the required program again. Open the installation menu and perform manual installation.

No picture or unstable picture

A scrambled or decoded signal is received.

Black and white picture

Check in CSM line COLOUR. In case the value is low (< "10"), increase the “Colour” value via the user menu. The new value is automatically stored for all TV channels.

No colours/colour lines around picture elements or colours not correct or unstable picture

1. Check in CSM line TV SYSTEM. If a “strange” system pops up, something has gone wrong during installation. Re-install the channel.
2. If in CSM line TV SYSTEM is “L”, then the installed system for this pre-set is “France” (SECAM standard). if the country requires a PAL standard, “West Europe” is required. Install the required program again: open the installation menu and perform manual installation. Select system “West Europe”.

Menu text not sharp enough

1. Press “MENU”, “TV”, “PICTURE”, “SMART PICTURE”. In case picture improves, decrease the contrast value. The new value(s) are automatically stored for all TV channels.
2. Check line “Contrast”. If the value is high, decrease the contrast value.

5.3.2 Sound Problems

No sound from left and right speaker

Check line 6 “Volume”. The value is low. Increase the value of “Volume”. The new value(s) are automatically stored (in “personal” pre-set) for all TV channels.

5.4 ComPair

5.4.1 Introduction

ComPair (Computer Aided Repair) is a service tool for Philips Consumer Electronics products. ComPair is a further development on the European DST (service remote control), which allows faster and more accurate diagnostics. ComPair has three big advantages:

- ComPair helps you to quickly get an understanding on how to repair the chassis in a short time by guiding you systematically through the repair procedures.
- ComPair allows very detailed diagnostics (on I^2C level) and is therefore capable of accurately indicating problem areas. You do not have to know anything about I^2C commands yourself because ComPair takes care of this.
- ComPair speeds up the repair time since it can automatically communicate with the chassis (when the microprocessor is working) and all repair information is directly available. When ComPair is installed together with the SearchMan electronic manual of the defective chassis, schematics and PWBs are only a mouse click away.

5.4.2 Specifications

ComPair consists of a Windows based fault finding program and an interface box between PC and the (defective) product. The ComPair interface box is connected to the PC via a serial or RS232 cable.
For this chassis, the ComPair interface box and the TV communicate via a bi-directional service cable via the service connector.

The ComPair fault finding program is able to determine the problem of the defective television. ComPair can gather diagnostic information in two ways:

- Automatic (by communication with the television): ComPair can automatically read out the contents of the entire error buffer. Diagnosis is done on I^2C level. ComPair can access the I^2C bus of the television. ComPair can send and receive I^2C commands to the micro controller of the television. In this way, it is possible for ComPair to communicate (read and write) to devices on the I^2C buses of the TV-set.
- Manually (by asking questions to you): Automatic diagnosis is only possible if the micro controller of the television is working correctly and only to a certain extends. When this is not the case, ComPair will guide you through the fault finding tree by asking you questions (e.g. *Does the screen give a picture? Click on the correct answer: YES / NO*) and showing you examples (e.g. *Measure test-point I7 and click on the correct oscillogram you see on the oscilloscope*). You can answer by clicking on a link (e.g. text or a waveform picture) that will bring you to the next step in the fault finding process.

By a combination of automatic diagnostics and an interactive question / answer procedure, ComPair will enable you to find most problems in a fast and effective way.

Beside fault finding, ComPair provides some **additional features** like:

- Emulation of the Dealer Service Tool (DST), which is not supported any more.
- If both ComPair and SearchMan (Electronic Service Manual) are installed, all the schematics and the PWBs of the TV are available by clicking on the appropriate hyperlink.
  Example: *Measure the DC-voltage on capacitor C2568 (Schematic/Panel) at the Mono-carrier.*
  - Click on the “Panel” hyperlink to automatically show the PWB with a highlighted capacitor C2568.
  - Click on the “Schematic” hyperlink to automatically show the position of the highlighted capacitor.

5.4.3 Stepwise Start-up

Under normal circumstances, a fault in the power supply, or an error during start-up, will switch the television to protection mode. ComPair can take over the initialisation of the television. In this way, it is possible to distinguish which part of the start-up routine (hence which circuitry) is causing the problem.
Take notice that the transition between two steps can take some time, so give the TV some time to reach a stable state. During the transition time, the LED can blink strangely.

Stepwise start-up explanation

This is realised via ComPair and is very helpful when a **protection** is activated (see also chapter “Protections”). The following diagram shows the start-up procedure of the TV. Every step of the stepwise start-up (also called trapped start-up) in the diagram corresponds with the number of times the LED blinks.

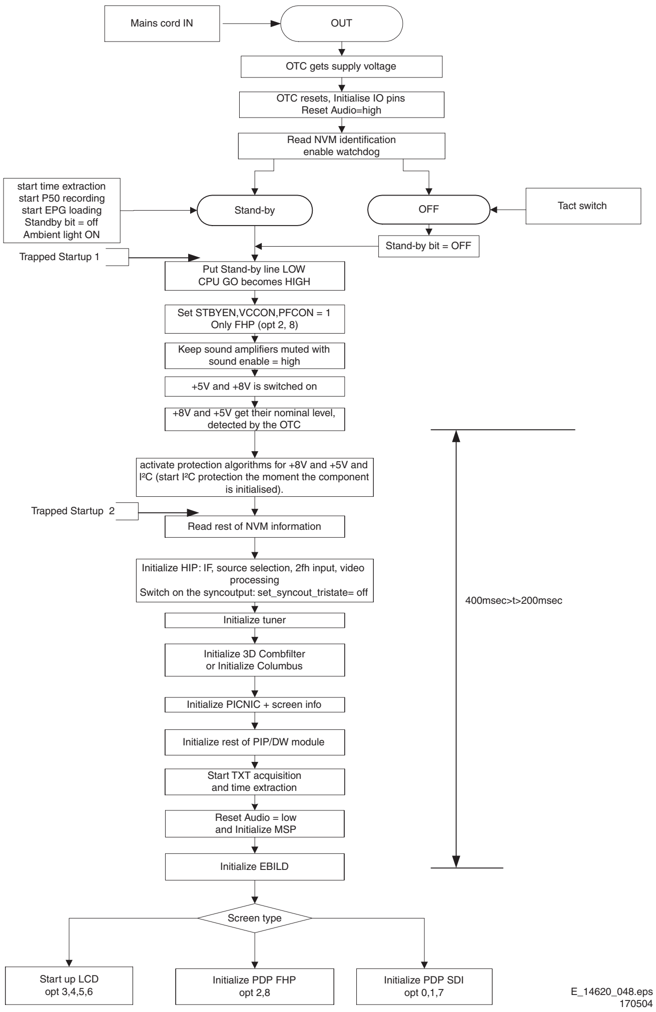

Mains cord IN
OUT
OTC gets supply voltage
OTC resets, Initialise IO pins
Reset Audio=high
Read NVM identification
enable watchdog
start time extraction
start P50 recording
start EPG loading
Standby bit = off
Ambient light ON
Stand-by
OFF
Tact switch
Stand-by bit = OFF
Trapped Startup 1
Put Stand-by line LOW
CPU GO becomes HIGH
Set STBYEN,VCCON,PFCON = 1
Only FHP (opt 2, 8)
Keep sound amplifiers muted with
sound enable = high
+5V and +8V is switched on
+8V and +5V get their nominal level,
detected by the OTC
activate protection algorithms for +8V and +5V and
I²C (start I²C protection the moment the component
is initialised).
Trapped Startup 2
Read rest of NVM information
Initialize HIP: IF, source selection, 2fh input, video
processing
Switch on the syncoutput: set_syncout_tristate= off
Initialize tuner
Initialize 3D Combfilter
or Initialize Columbus
Initialize PICNIC + screen info
Initialize rest of PIP/DW module
Start TXT acquisition
and time extraction
Reset Audio = low
and Initialize MSP
Initialize EBILD
400msec>t>200msec
Screen type
Start up LCD
opt 3,4,5,6
Initialize PDP FHP
opt 2,8
Initialize PDP SDI
opt 0,1,7
E_14620_048.eps
170504

Figure 5-3 Stepwise start-up

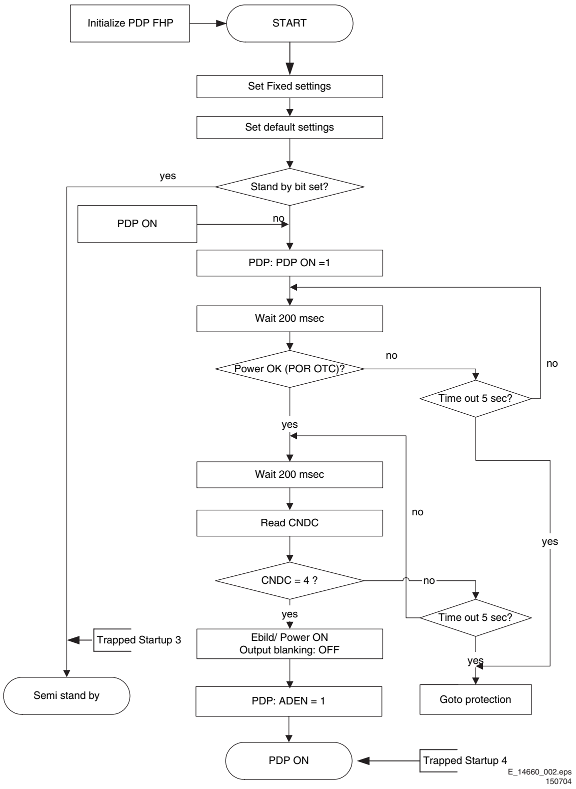

Initialize PDP FHP
START
Set Fixed settings
Set default settings
yes
Stand by bit set?
PDP ON
no
PDP: PDP ON =1
Wait 200 msec
Power OK (POR OTC)?
no
no
Time out 5 sec?
yes
Wait 200 msec
no
Read CNDC
yes
CNDC = 4 ?
no
yes
Time out 5 sec?
Trapped Startup 3
Ebild/ Power ON
Output blanking: OFF
yes
Semi stand by
PDP: ADEN = 1
Goto protection
PDP ON
Trapped Startup 4
E_14660_002.eps
150704

Figure 5-4 Stepwise start-up part 2: Initialise FHP

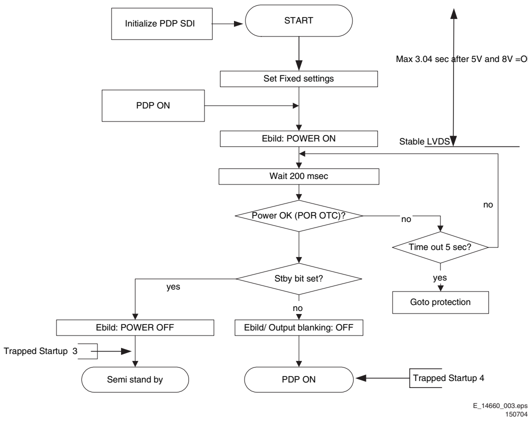

Initialize PDP SDI
START
Max 3.04 sec after 5V and 8V =OK
Set Fixed settings
PDP ON
Ebild: POWER ON
Stable LVDS
Wait 200 msec
no
Power OK (POR OTC)?
no
Time out 5 sec?
yes
Stby bit set?
yes
Goto protection
no
Ebild: POWER OFF
Ebild/ Output blanking: OFF
Trapped Startup 3
Semi stand by
PDP ON
Trapped Startup 4
E_14660_003.eps
150704

Figure 5-5 Stepwise start-up part 2: Initialise SDI (*)

Notes (*):

- When the TV is in stepwise mode and, due to stepping-up, a protection is activated, the TV will really go into protection (blinking LED). The TV will not leave the stepwise mode however. If state X is the state where the TV went to protection, stepwise start-up will return to state X-1. At state (X-1) diagnostic measurements can be performed. Also, in the short time the TV is in state X but not yet in protection, you can also do some measurements.
- Stepwise start-up can NOT be used for Samsung displays (SDI). The TV will not react in a proper way, due to other timing specifications.

5.4.4 How To Connect

This is described in the chassis fault finding database in ComPair.

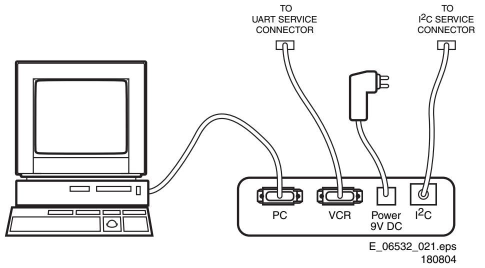

TO
UART SERVICE
CONNECTOR
TO
I²C SERVICE
CONNECTOR
PC
VCR
Power
9V DC
I²C
E_06532_021.eps
180804

Figure 5-6 ComPair interface connection

5.4.5 How To Order

ComPair order codes (EU/AP/LATAM):

- Starter kit ComPair32/SearchMan32 software and ComPair interface (excl. transformer): 3122 785 90450.
- ComPair interface (excl. transformer): 4822 727 21631.
- Starter kit ComPair32 software (registration version): 3122 785 60040.
- Starter kit SearchMan32 software: 3122 785 60050.
- ComPair32 CD (update): 3122 785 60070 (year 2002), 3122 785 60110 (year 2003 onwards).
- SearchMan32 CD (update): 3122 785 60080 (year 2002), 3122 785 60120 (year 2003), 3122 785 60130 (year 2004).
- ComPair firmware upgrade IC: 3122 785 90510.
- Transformer (non-UK): 4822 727 21632.
- Transformer UK: 4822 727 21633.
- ComPair interface cable: 3122 785 90004.
- ComPair interface extension cable: 3139 131 03791.
- ComPair UART interface cable: 3122 785 90630.

Note: If you encounter any problems, contact your local support desk.

5.5 Error Codes

5.5.1 Introduction

The error code buffer contains all detected errors since the last time the buffer was erased. The buffer is written from left to right, new errors are logged at the left side, and all other errors shift one position to the right.
When an error has occurred, the error is added to the list of errors, provided the list is not full or the error is a protection error.
When an error occurs and the error buffer is full, then the new error is not added, and the error buffer stays intact (history is maintained), except when the error is a protection error.
To prevent that an occasional error stays in the list forever, the error is removed from the list after 50+ operation hours.
When multiple errors occur (errors occurred within a short time span), there is a high probability that there is some relation between them.

5.5.2 How to read the Error Buffer

Use one of the following methods:

- On screen via the SAM (only if you have a picture). Examples:
  - **00000**: No errors detected
  - **60000**: Error code 6 is the last and only detected error
  - **96000**: Error code 6 was first detected and error code 9 is the last detected error
- Via the blinking LED procedure (when you have no picture). See next paragraph.
- Via ComPair.

5.5.3 How to clear the Error Buffer

Use one of the following methods:

- By activation of the “RESET ERROR BUFFER” command in the SAM menu.
- With a normal RC, key in sequence “MUTE” followed by **“062599”** and “OK”.
- When you transmit the commands “DIAGNOSE” - “99” - “OK” with ComPair (or with a DST).
- If the content of the error buffer has not changed for 50+ hours, it resets automatically.

5.5.4 Error Codes

In case of non-intermittent faults, clear the error buffer before you begin the repair. This to ensure that old error codes are no longer present. Before clearing the buffer, write down the content, as this history can give you significant information.
If possible, check the entire contents of the error buffer. In some situations, an error code is only the result of another error code and not the actual cause (e.g., a fault in the protection detection circuitry can also lead to a protection).
There are various errors:

- I^{2}C device errors.
- I^{2}C bus errors.
- Protection errors.
- Errors not related to an I^{2}C device, but of importance:
  - **FEM (Falconic with Embedded Memory) (Error 26):** at start-up, after initialisation of the PICNIC, the presence of the FEM can be checked.

Table 5-3 Error Code Overview

Error	Device	Description	Def. item	Def. Module indication	Diagr.
1	M24Cxx	NVM, spontaneous blinking error 1	7011	-	B5a
3	SAA4978	PICNIC	7713	Feature Box	B3a
4	Supply 5 V	5V protection	-	+5V Supply	B5a
5	Supply 8 V	8V protection	-	+8V Supply	B5a
6	Slow I^{2}C bus blocked	Spontaneous blinking error 6	-	Slow I^{2}C Blocked	-
8	TDA932x	HIP High-end Input Processor	7323	Chroma IF IO	B2
13	UV1318/...	Tuner protection	1T01	Tuner	B13a
14	MSPxxxx	ITT sound processor	7A02	Audio module	B6a
18	Fast I^{2}C bus blocked	Spontaneous blinking error 18	-	Fast I^{2}C Blocked	-
21	M62320	I/O Expander	7P56	Video Dual Screen	B15b
26	SAA4998	FEM (Falconic with Embedded Memory)	7760	+3V (FBX) Supply	B3b
27	T6TX5	Eagle 1C	7720	+3V (FBX) Supply	B3c
32	M29W400xx	Flash Ram (EPG)	7012	EPG Memory	B5a
35	T6TU5	Columbus	7752	Video Control	B3d
55	DC/DC converter	One of the voltages is not ok + protection error	-	MSB	-
76	Audio supply	Audio supply protection	-	-	-
118	AD9883A	AD converter	7L01	HD	B19a
121	EPLD	EPLD error	7V01	Video control	B19d
Note: If error 3 or error 55 appears, sometimes error 16 is also logged. Error 16 is a non existing error.					

Note:

- Error codes 1, 6, or 18 are protection codes and in this case, supplies of some circuits will be switched “off”. Also, in protection, the LED will blink the number of times equivalent to the most recent error code.

5.6 The Blinking LED Procedure

5.6.1 Introduction

Via this procedure, you can make the contents of the error buffer visible via the front LED. This is especially useful for fault finding, when there is no picture.

When the SDM is activated, the front LED will show (blink) the contents of the error-buffer. Error-codes > 10 are shown as follows:

- A long blink of 750 ms (which is an indication of the decimal digit),
- A pause of 1.5 s,
- “n” short blinks (where “n” = 1 - 9),
- When all the error-codes are displayed, the sequence finishes with a LED blink of 3 s,
- The sequence starts again.

Note: For error codes >100, the first two digits (hundred-and-ten) are considered as one digit (one long blink)

Example: Error 12 9 6 121 0.
After activation of the SDM, the front LED will show:

- 1 long blink of 750 ms (which is an indication of the decimal digit) followed by a pause of 1.5 s,
- 2 short blinks followed by a pause of 3 s,
- 9 short blinks followed by a pause of 3 s,
- 6 short blinks followed by a pause of 3 s,
- 12 long blinks of 750 ms (which is an indication of “120”) followed by a pause of 1.5 s,
- 1 short blink followed by a pause of 3 s,
- 1 long blink of 3 s to finish the sequence,
- The sequence starts again.

Note: If errors 1, 6, or 18 occur, the LED always gives the last occurred error even if the TV is NOT in service mode.

5.6.2 How to Activate

Use one of the following methods:

- Activate the SDM (only via soldering pads marked “SDM” on SSB, see figure “Service pads”). The blinking front LED will show the entire contents of the error buffer (this works in “normal operation” mode and in “protection” mode).
- Transmit the commands “MUTE” - **“062500”** - “OK” with a normal RC. The complete error buffer is shown. Take notice that it takes some seconds before the blinking LED starts.
- Transmit the commands “MUTE” - **“06250x”** - “OK” with a normal RC (where “x” is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... Take notice that it takes some seconds before the blinking LED starts.
- “DIAGNOSE X” with the DST (where “x” is a number between 1 and 5). When x= 1 the last detected error is shown, x= 2 the second last error, etc.... When x = 0 all errors are shown.

5.7 Protections

Note: With Samsung PDP displays (SDI V4) boards it is possible that for some errors the blinking LED procedure does not start immediately (e.g. error 18). When the error occurs, the TV goes to protection and it is possible that you have to wait 30 seconds before the blinking LED procedure starts.

5.7.1 Introduction

This chassis has only one microprocessor (OTC), which remains active during Stand-by. This because power of the microprocessor and the attached memory chip set is coming from the 3V3 supply, which is derived from the 5V Stand-by-circuitry. Therefore, in both Power-on as in Stand-by mode, the microprocessor is connected to this power supply.

If a fault situation is detected, an error code will be generated and if necessary, the TV is put in protection mode. The protection mode is indicated by the blinking of the front LED at a frequency of 3 Hz (or by a coded blinking in special cases).

The content of the error buffer can be read via the service menu (SAM), the blinking LED procedure or via DST/ComPair.

To get a quick diagnosis, this chassis has three service-modes implemented:

- The **Customer Service Mode** (CSM).
- The **Service Default Mode** (SDM). Start-up of the TV in a predefined way.
- The **Service Alignment Mode** (SAM). In this mode, items of the TV can be adjusted via a menu.

You can activate both SDM and SAM modes via the “service pads” on the SSB (see figure “Service pads”), via an RC-transmitter (DST or standard RC), or via ComPair. It is not possible to activate the SAM in “stand-by”; the TV has to be in “normal operation” mode.

The “Protection Diagram” shows the structure of the protection system. See diagram below.

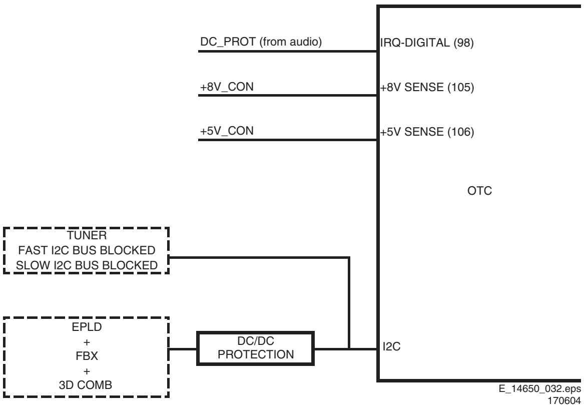


Figure 5-7 Protection diagram

There are several types of protections:

- I^{2}C related protections.
- OTC related protections (via polling on I/O pins or via algorithms).
- Hardware protection

All protections are explained below.

5.7.2 I^{2}C Related Protections

In normal operation, some registers of the I^{2}C controlled ICs are refreshed every 200 ms. During this sequence, the I^{2}C buses and the I^{2}C ICs are checked.
An I^{2}C protection will take place if the SDA and SCL lines are short-circuited to ground, or to each other. An I^{2}C error will also occur, if the power supply of the IC is missing.

DC/DC protection: When a 3V3 supply is short-circuited, the DC/DC converter switches “off” and goes in protection. The FBX, EPLD IC, and 3D comb IC have no supply voltage and give no acknowledge. In this case, the TV should go into protection. An error code is written in the NVM: DC/DC error.

FBX protection: the FBX protection is not available any more. It is replaced by the DC/DC protection.

5.7.3 OTC Related Protections

If a protection is detected at an OTC input, the OTC will start to scan all protection inputs every 200 ms for 5 times. If the protection on one of the inputs is still active after 1 s, the microprocessor will put the TV in the protection mode. Before the scanning is started, a so-called "ESD refresh" is carried out. This is done, because the interrupt on one of the inputs is possibly caused either by a flash or by ESD. As a flash or ESD can influence IC settings, the HIP, MSP, 3D Comb and wireless module (not used in this set) are initialised again, to ensure the normal picture and sound conditions of the TV.

8 V and 5 V protections: The microprocessor senses the presence of the 8 V and 5 V (via the "+5V_CON" and "+8V_CON" lines). If one (or both) of these voltages is (are) not present, an error code is stored in the error buffer of the NVM, and the TV is put in the protection mode.

Audio Supply protection: The OTC senses if the audio module is in protection via IRQ-DIGITAL (pin 98 of OTC). If this is the case, the OTC puts the TV in protection.

5.7.4 Hardware Protection

Short-circuiting the 3V3 supply from the DC/DC converter will shut down the DC/DC converter. The absence of the 3V3 supply line is also sensed via I^2C (see description Audio Supply protection above), this is useful if there is something wrong in the detection circuit of the DC/DC converter.

Audio DC Protection: This protection occurs when there is a DC voltage on the speakers. In that case, the Main Supply is switched "off". The Stand-by Supply is still working. For the Samsung SDI V4 displays, all internal supplies (except the 5V2), are switched "off" and the LED on the Samsung SDI V4 display (on PSU Alarm board) blinks 11 times., which means there is an overvoltage protection.

Repair tip: If there is an audio DC protection (DC voltage on your speakers), you will probably see error 18 blink. To be sure this is an audio DC protection, disconnect the cable between the SSB and the audio PWB and also the cable between the Main Supply and the Audio PWB. If the TV starts up, it is very likely that there is DC on the speakers. Check, and replace if necessary, the audio amplifiers.
Note: It is also possible that you have an Audio DC Protection because of an interruption in one or both speakers (the DC voltage that is still on the circuit can not disappear through the speakers).

5.8 Repair tips

5.8.1 Power Supply Unit (for Fujitsu - FHP - plasma displays)

Below a troubleshoot sequence for the **FHP** power supply is given (so this is **not** valid for the **SDI** power supply, this is explained further on).

Stand-by Supply
1. 400V present?
2. +9V_STDBY, +5V_STDBY, and 25V_HOT present?

Preconditioner
1. Relay 1450 and 1440 "on" = switch "on" and supply "on" (LATCH= "H" and STANDBY= "L").
2. 400V or rectified mains present on item 2616?
3. 40V present on item 2664?
4. 15V present on item 2662?

LLC Supply
1. 25V_HOT (from Stand-by supply) present?
2. 25V_HOT_SW (from Preconditioner) present?
3. 17V on pin 15 of item 7001 present?
4. Vcego= "H" and LATCH= "H"?
5. Vrs present? (Vrs=Vs/67).
6. Remark: Vs_unswitched = 65V when switch 7050 is open.

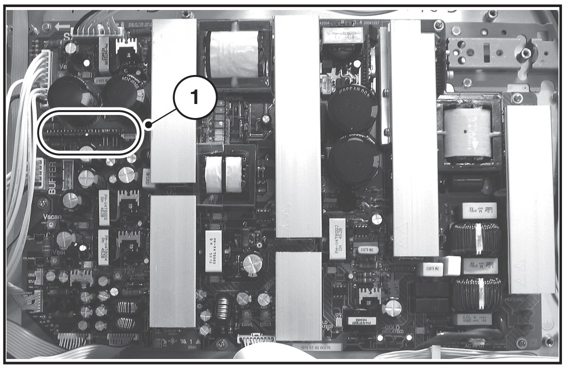
Va Supply
1. Vs_unswitched present?
2. 30V on item 3133 present?
3. Vsa_control= "L" (Vsago= "H" and Vs_lowlim= "H")
4. Vra present? (Vra=Va/48).

Vcc Supply
1. Vs_switched present?
2. Vccgo= "H"? (Vcego= "H").

Vs (switched)
1. 95V present on cathode of item 6054?
2. POK= "H" and Vsa_control= "L"? (POK= "H" when Vs, Va, Vcc, 12V, and 8V6 are above their lower limit)

5.8.2 Power Supply Unit (for Samsung - SDI - plasma displays)

This PSU is for Service a "black box". When defective (this can be traced via error-codes in the error buffer, or by strange phenomena), a new panel must be ordered and after receipt, the defective panel must be send for repair.



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140405

Figure 5-8 SDI PSU Alarm board

A simple troubleshoot method for the SDI PSU is given below. When the TVis in protection check the LED on the PSU Alarm board (see (1) in figure "SDI PSU Alarm board"). In normal working mode, this LED is "on". However, if this LED is blinking, the PSU is in protection. See table:

Nr. of blinks	Fault Description	Remark
1	V_A block problem	Display voltages
2	12V block	
3	D5VL	Display voltage
4	D3V3	Display voltage
5	V_S	Display voltage
6	V_{CC}/V_G	Display voltage
7	V_{SET}	Display voltage
8	V_E	Display voltage
9	Thermal protection	
10	PFC_OK	Display voltage driving signal
11	OVP	Overvoltage protection OR DC-prot
12	Time_Over	A control signal to the PSU is missing after a certain time period
13	V_{SCAN}	Display voltage

5.8.3 3V3 Supply (DC/DC converter on the SSB)

As mentioned above, the DC/DC converter is switched "off" when something goes wrong (detection of a missing 3V3 supply at one of the devices supplied by the 3V3). Because of

this, the TV goes to protection (I^2C protection). Error code “55” is logged.
For further diagnoses, you need to overrule the I^2C protection: put the TV in Service Default Mode by means of the solder pads on the SSB (see figure “Service pads”).
The DC/DC converter is still not working because it is switched “off” by the 3V3_FAULT line (schematic B12). Now you have some possibilities:

1. First, measure the impedance over diode 6U06. In normal conditions, you should measure approximately 120 ohm (if possible, verify this with another set). If the impedance is much too low, do not try to start up the converter as mentioned below. Remind that if FET 7U03 is short-circuited, this will also influence your measurement.
2. Desolder coils 5U05 and 5U06, connect an external 3V3 supply at capacitor 2U23 (current limitation to 500 mA) and a second external 3V3 supply at capacitor 2U31 (current limitation to 800 mA). The normal working current of the 3V3_SIM line is approximately 400 mA and the normal working current for the 3V3_DCDCFBX line is approximately 700 mA. Therefore, if one of the currents exceeds their nominal value you can determine in which circuit the overload is situated. If the TV would start up and you have normal picture, there is probably no overload but a problem in the detection circuits.
3. If you do not have two external power supplies, you can do the following: Desolder coils 5U02, 5U03, and 5U04 (you must desolder all three, otherwise the circuit could be damaged), connect an external power supply of 3V3 at the cathode of diode 6U06. Make sure to limit the current of this external supply to approximately 1200 mA. If the supplied current exceeds 1100 mA (approximately normal working current) you can conclude that one of the devices supplied by 3V3 is short-circuited.
4. Another possibility is to force the converter to start up by short-circuiting (and keep short-circuited) resistor 3U25 (B12).
   Caution: Be aware that this can damage the TV. Even if you measure approximately 120 ohm over diode 6U06, there can still be something wrong in the converter itself. By short-circuiting resistor 3U25, the internal protection of the converter is disabled.

5.8.4 Protections

Activating SDM via the “service pads” will overrule the processor-controlled protections, but not the hardware protections. This means, that the A/D-input protections (5 and 8 V) and the I^2C “not-acknowledging” info of FBX + EPLD + 3D Comb and of the tuner are overruled.
Caution: When doing this, the service technician must know what he is doing, as it could lead to damaging the TV.

5.8.5 Repair tip table

Table 5-4 Repair tips

Phenomenon	Possible Cause	Repair tip
“F” in right corner of the screen and set is not reacting on remote control. The local keyboard is functioning.	TV is in factory mode.	Press MENU button on local keyboard for at least 3 seconds. Set will leave factory mode and function normally again.
No picture, LED blinking at 3 Hz.	Set is in protection due to various causes. For error codes see error-code list.	You have no picture, so: - Read the error buffer via ComPair (error buffer is accessible when set is in protection, ComPair-file will guide you to this). - Read the blinking LED information via standard remote command <mute>**06250x**<ok>. - Or you read the error code sequence via standard remote command <mute>**062500**<ok>. When you have found the error, check the circuitry related to the supply voltage and I^2C-communication or the circuitry that triggers the protection.
No picture, LED blinking with code 6-6-6 or 18-18-18.	No communication on slow I^2C- or fast I^2C-bus.	As processor cannot communicate with one of the 2 buses, the Stand-by-LED spontaneously starts blinking 6-6-6-etc. or 18-18-18-etc... If in the error buffer somewhere is an error 6 or 18, these will have the highest priority starting the mentioned blinking. Measure, dependent of the error on the I^2C-bus, which device is loading the bus (use I^2C-overview).
No picture, LED blinking with code 1-1-1.	No communication on NVM-I^2C bus to the uP.	As the uP cannot communicate with the NVM I^2C bus, it spontaneously starts blinking 1-1-1. **Note:** when there is no access to the NVM, a lot of picture setting can go wrong.
No RC-reception. Blue LED does not echo RC-commands.	uP circuitry or RC-receiver is defective.	In case the TV does react on a local keyboard operation, you must check the RC-receiver circuitry (diagram “J”).
Picture is not synchronised.	The sync is derived in the HIP.	Check crystals in the HIP circuit on bad contacts.
Picture is distorted.	Check video-path in Service Default Mode.	Investigate whether there is an error code present in the error buffer. In case there is one, check the I^2C-bus and/or supply lines (see overview supply lines). Measure and check signal path Tuner-HIP-FBX-EPLD.
Picture with horizontal stripes.	Pixel Plus processing is malfunctioning	Check functionality on circuitry (B3a, B3b, B3c and B3d) of PICNIC, FEM, EAGLE, COLUMBUS and/or field memories. **Tip:** the whole Pixel Plus chipset can be diagnosed via ComPair.
No NextView (EPG).	IC7012 defective or not powered.	Check circuitry around IC7012 on diagram “B5a”.
No Teletext.	IC7007 defective or not powered.	Check circuitry around IC7007 on diagram “B5a”.
Problems caused by EPG (Electronic Program Guide). The TV set "hangs".	Problems with NexTView EPG broadcasts.	To switch from EPG 2C3 to Teletext guide, press for 4 seconds, simultaneously the MENU button on the TV and digit 0 on the remote. The option settings for NexTView type and FlashRAM will not change.
NexTView EPG is not functioning only Teletext guide.	EPG version 2C3 is switched “off” during production.	To switch from Teletext guide to EPG 2C3, press for 4 seconds, simultaneously the MENU button on the TV and digit 1 on the remote. The option settings for NexTView type and Flashram will not change.
Various symptoms, due to missing local supply voltage.	An interrupted fuse, NFR-resistor or connection.	When no symptom or error code leads you to a specific circuitry, use the supply lines overview (see supply lines overview), for a quick scan of all supply lines.
No sound at the speakers but sound at monitor out.	Possible problem with the class D amplifier	Check circuitry around IC7700 on diagram “SA3” (LCD) or “C” (PDP).
No sound at the speakers but sound at monitor out.	Sound enable from OTC is HIGH, speakers are muted	Check pin 95 of OTC on diagram “B5a”.
No sound at the speakers not at monitor out, but sound at SCART 1 output.	POR line is low, anti plop circuit mutes the sound	Check pin 8 on connector 1739 on audio panel. Diagram “C” for PDP sets and diagram “SA3” for LCD sets
No sound from any output (except headphone)	Reset audio is high or MSP is not properly reset	Check pin 16 of MSP (diagram “B6a”) and circuitry around MSP.
No sound from the tuner but sound from any other input.	Problem with the delay line (PDP sets only)	Check circuitry on diagram “B6d”.

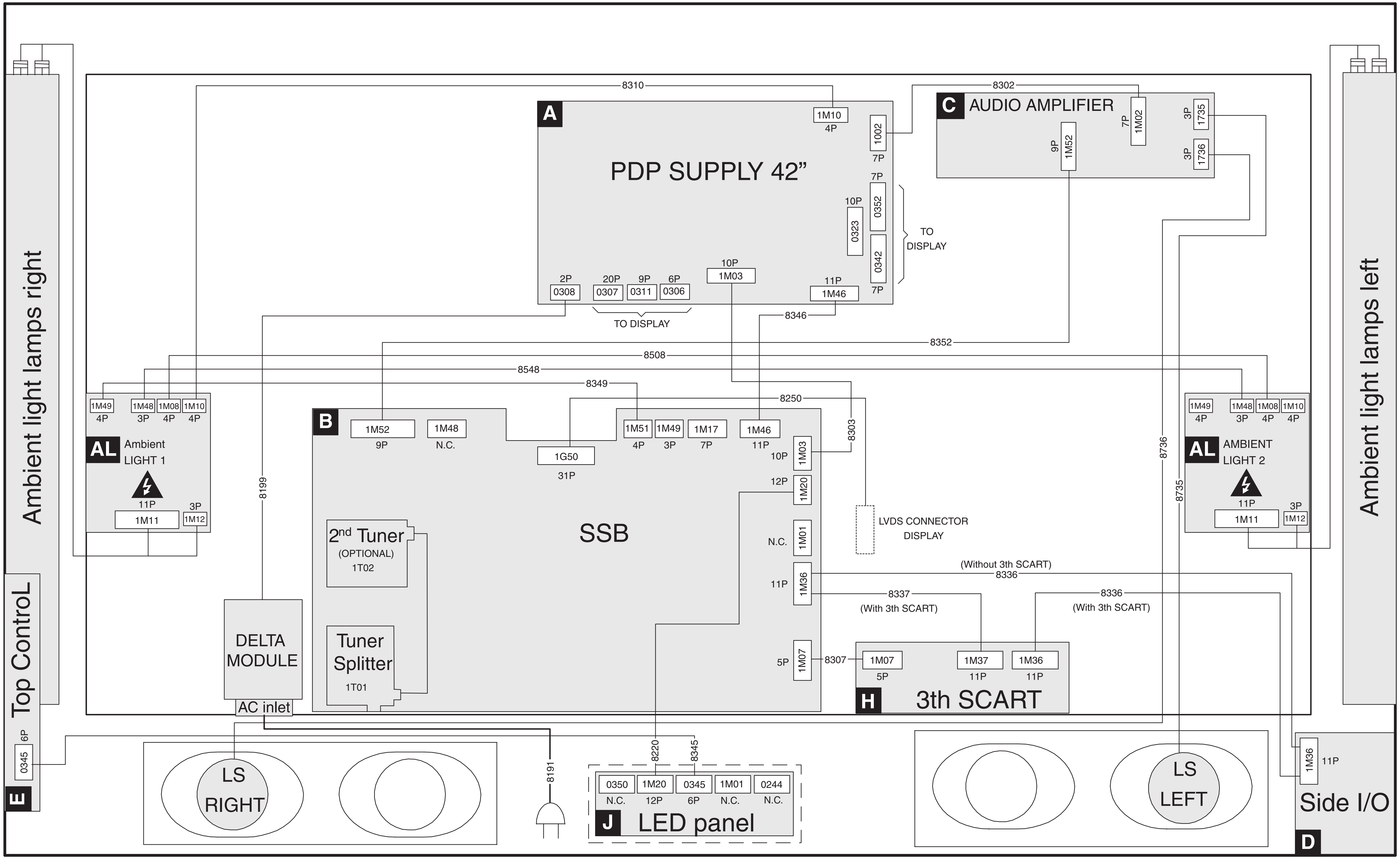
5.9 Software Downloading

In this chassis, you can **upgrade** the main software via ComPair without removing the back cover of the TV (it is possible that early production sets don't have a hole in the back plate, in this case you have to remove the back plate). The switch, which is needed for the software downloading procedure, can be reached through a gap in the back cover or the SSB shielding. The switch can be operated with a toothpick or something like that. Make sure that you do not damage the PWB with sharp objects. You can find more information on how this procedure works in the ComPair file. It is possible that not all sets are equipped with the hardware, needed to make software upgrading possible. To speed up the programming process the firmware of the ComPair interface can be upgraded. See paragraph "How To Order" for the order number.

6. Block Diagrams, Testpoint Overviews, and Waveforms

Wiring Diagram 42 Inch FHP Step

WIRING 42” FHP


Ambient light lamps right
Ambient light lamps left
A
PDP SUPPLY 42”
1M10
4P
1002
7P
7P
0352
10P
0323
0342
7P
TO DISPLAY
10P
1M03
11P
1M46
2P
0308
20P
0307
9P
0311
6P
0306
TO DISPLAY
C
AUDIO AMPLIFIER
9P
1M52
7P
1M02
3P
1735
3P
1736
8310
8302
8346
8352
8508
8548
8349
8250
8303
8736
8735
8199
AL
Ambient LIGHT 1
1M49
4P
1M48
3P
1M08
4P
1M10
4P
11P
1M11
3P
1M12
AL
AMBIENT LIGHT 2
1M49
4P
1M48
3P
1M08
4P
1M10
4P
11P
1M11
3P
1M12
B
1M52
9P
1M48
N.C.
1G50
31P
1M51
4P
1M49
3P
1M17
7P
1M46
11P
10P
1M03
12P
1M20
N.C.
1M01
11P
1M36
5P
1M07
SSB
2nd Tuner
(OPTIONAL)
1T02
Tuner Splitter
1T01
LVDS CONNECTOR DISPLAY
(Without 3th SCART)
8336
8337
(With 3th SCART)
8336
(With 3th SCART)
8307
1M07
5P
1M37
11P
1M36
11P
H
3th SCART
DELTA MODULE
AC inlet
Top ControL
6P
0345
E
LS RIGHT
8191
8220
8345
0350
N.C.
1M20
12P
0345
6P
1M01
N.C.
0244
N.C.
J
LED panel
LS LEFT
1M36
11P
Side I/O
D

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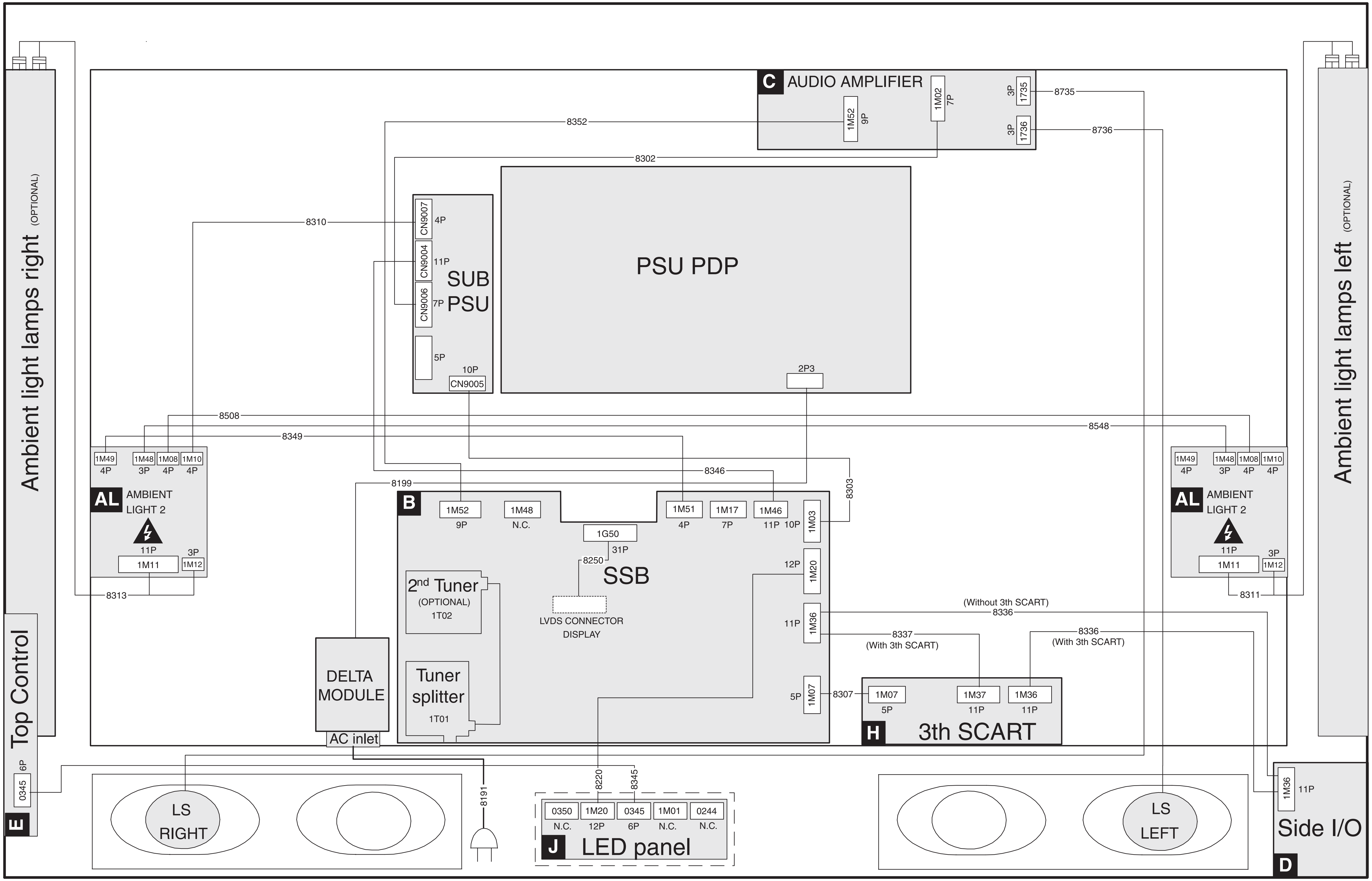
Wiring Diagram 50 Inch SDI Step

WIRING 50" SDI


C AUDIO AMPLIFIER
1M52 9P
1M02 7P
3P 1735
3P 1736
8735
8736
8352
8302
8310
PSU PDP
2P3
SUB PSU
CN9007 4P
CN9004 11P
CN9006 7P
5P
10P CN9005
Ambient light lamps right (OPTIONAL)
Ambient light lamps left (OPTIONAL)
8508
8349
8548
8346
8303
8199
AL AMBIENT LIGHT 2
1M49 4P
1M48 3P
1M08 4P
1M10 4P
11P 1M11
3P 1M12
8313
8311
B
1M52 9P
1M48 N.C.
1G50 31P
1M51 4P
1M17 7P
1M46 11P
10P 1M03
12P 1M20
11P 1M36
5P 1M07
8250
SSB
2nd Tuner (OPTIONAL) 1T02
LVDS CONNECTOR DISPLAY
Tuner splitter 1T01
DELTA MODULE
AC inlet
(Without 3th SCART) 8336
8337 (With 3th SCART)
8336 (With 3th SCART)
8307
H 3th SCART
1M07 5P
1M37 11P
1M36 11P
Top Control
E
0345 6P
LS RIGHT
8191
8220
8345
J LED panel
0350 N.C.
1M20 12P
0345 6P
1M01 N.C.
0244 N.C.
LS LEFT
1M36 11P
Side I/O
D

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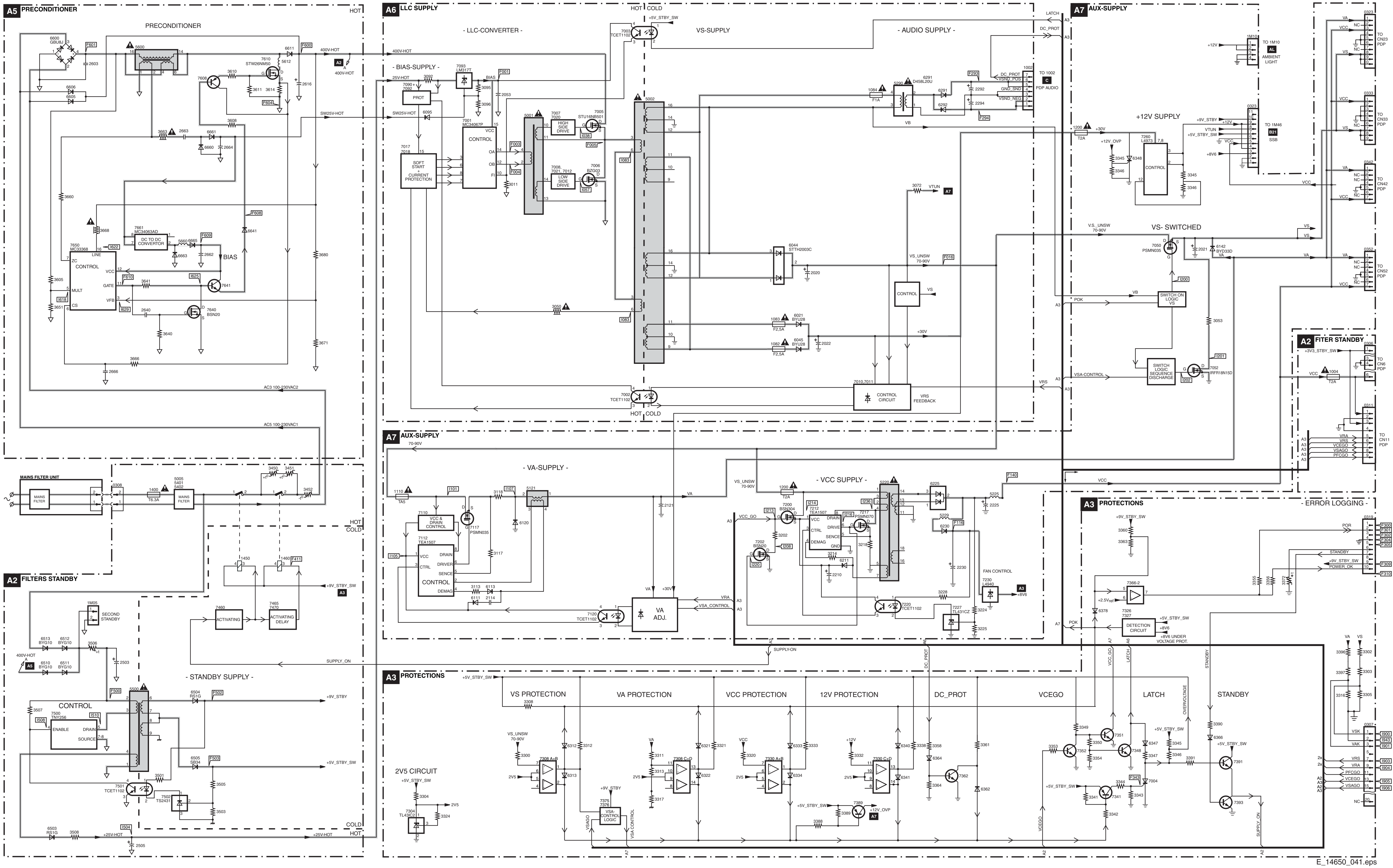
Block Diagram Supply 42 Inch FHP

SUPPLY 42" FHP


A5 PRECONDITIONER
PRECONDITIONER
HOT
A6 LLC SUPPLY
- LLC-CONVERTER -
- BIAS-SUPPLY -
SOFT START + CURRENT PROTECTION
CONTROL
HIGH SIDE DRIVE
LOW SIDE DRIVE
HOT COLD
VS-SUPPLY
- AUDIO SUPPLY -
TO 1002 PDP AUDIO
A7 AUX-SUPPLY
+12V SUPPLY
TO 1M10 AMBIENT LIGHT
TO 1M46 SSB
VS- SWITCHED
SWITCH ON LOGIC VS
SWITCH LOGIC SEQUENCE DISCHARGE
CONTROL CIRCUIT
VRS FEEDBACK
TO CN23 PDP
TO CN33 PDP
TO CN42 PDP
TO CN52 PDP
A2 FILTER STANDBY
TO CN6 PDP
TO CN11 PDP
MAINS FILTER UNIT
MAINS FILTER
A7 AUX-SUPPLY
- VA-SUPPLY -
VCC & DRAIN CONTROL
VA ADJ.
- VCC SUPPLY -
FAN CONTROL
A3 PROTECTIONS
- ERROR LOGGING -
DETECTION CIRCUIT
+8V6 UNDER VOLTAGE PROT.
TO 1M03 SSB
A2 FILTERS STANDBY
SECOND STANDBY
ACTIVATING
ACTIVATING DELAY
- STANDBY SUPPLY -
CONTROL
ENABLE
DRAIN
SOURCE
A3 PROTECTIONS
VS PROTECTION
VA PROTECTION
VCC PROTECTION
12V PROTECTION
DC_PROT
VCEGO
LATCH
STANDBY
2V5 CIRCUIT
VSA-CONTROL LOGIC
TO CN7 PDP

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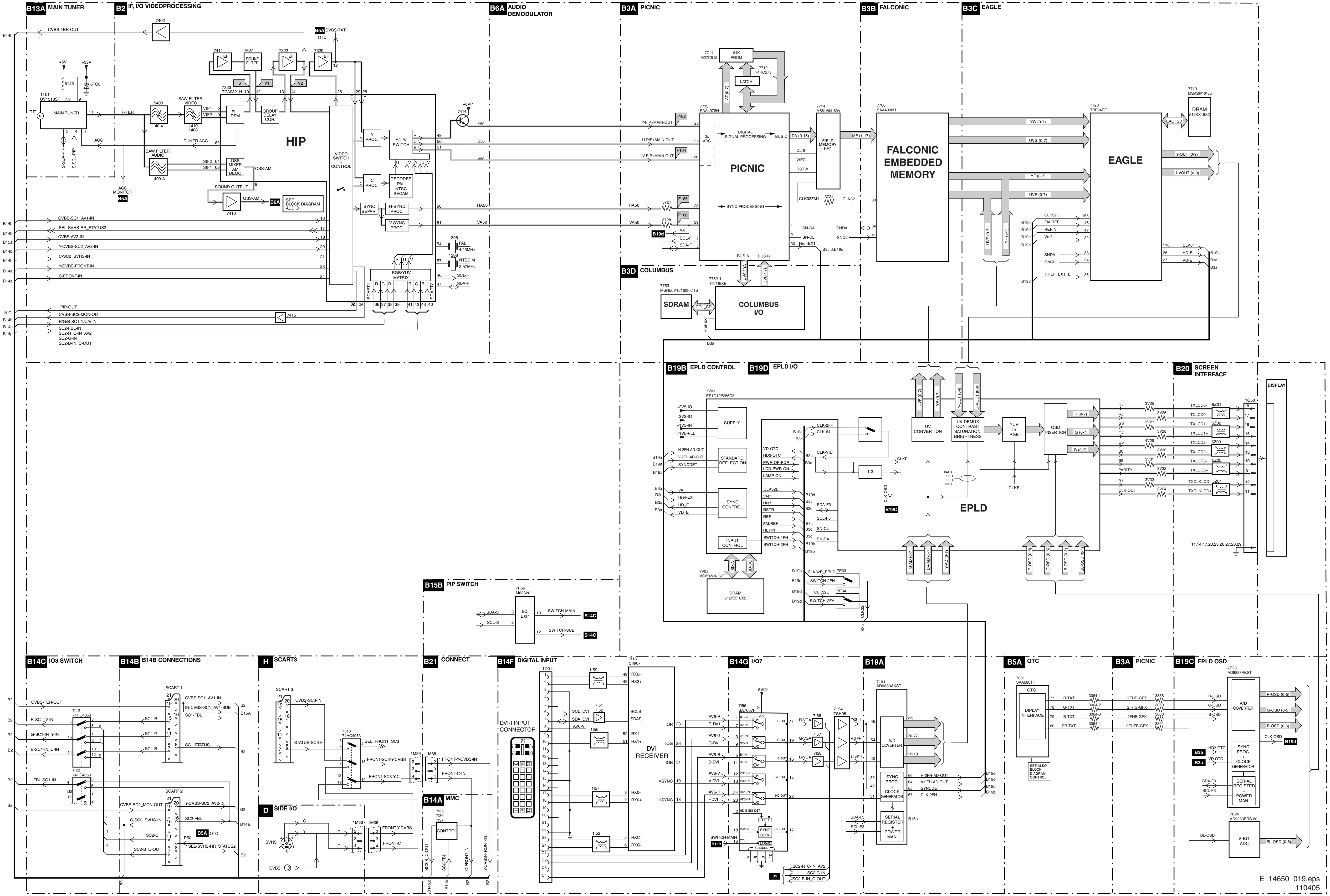
Block Diagram Video

VIDEO


B13A MAIN TUNER
B2 IF, I/O VIDEOPROCESSING
B6A AUDIO DEMODULATOR
B3A PICNIC
B3B FALCONIC
B3C EAGLE
B3D COLUMBUS
MAIN TUNER
1T01 UV1318ST
IF-TER
AGC
TUNER AGC
SAW FILTER VIDEO
SAW FILTER AUDIO
PLL DEMO
GROUP DELAY COR.
QSS MIXER AM DEMO
QSS-AM
SOUND-OUTPUT
SEE BLOCK DIAGRAM AUDIO
HIP
7323 TDA9321H
VIDEO SWITCH + CONTROL
Y PROC.
Y/U/V SWITCH
C PROC.
DECODER PAL NTSC SECAM
SYNC SEPAR.
H-SYNC PROC.
V-SYNC PROC.
RGB/YUV MATRIX
CVBS-TER-OUT
CVBS-SC1_AV1-IN
SEL-SVHS-RR_STATUS2
CVBS-AV3-IN
Y-CVBS-SC2_AV2-IN
C-SC2_SVHS-IN
Y-CVBS-FRONT-IN
C-FRONT-IN
PIP-OUT
CVBS-SC2-MON-OUT
R/G/B-SC1-Y/U/V-IN
SC2-FBL-IN
SC2-R_C-IN_AV2
SC2-G-IN
SC2-B-IN_C-OUT
PAL 4.43MHz
NTSC M 3.57MHz
SCL-F
SDA-F
PICNIC
7713 SAA4978H
DIGITAL SIGNAL PROCESSING
SYNC PROCESSING
64K PROM
LATCH
FIELD MEMORY FM1
FALCONIC EMBEDDED MEMORY
7760 SAA4998H
EAGLE
7720 TBF24EF
DRAM 512KX16X2
COLUMBUS I/O
SDRAM
YG (0-7)
UVG (0-7)
YF (0-7)
UVF (0-7)
Y-OUT (0-9)
U-VOUT (0-9)
B19B EPLD CONTROL
B19D EPLD I/O
B20 SCREEN INTERFACE
DISPLAY
SUPPLY
STANDARD DEFLECTION
SYNC CONTROL
INPUT CONTROL
DRAM 512KX16X2
UV CONVERSION
UV DEMUX CONTRAST SATURATION BRIGHTNESS
YUV to RGB
OSD INSERTION
EPLD
7V01 EP1C12F256C8
B15B PIP SWITCH
I/O EXP
SWITCH-MAIN
SWITCH-SUB
B14C IO3 SWITCH
B14B B14B CONNECTIONS
H SCART3
B21 CONNECT
B14F DIGITAL INPUT
B14G I/O7
B19A
B5A OTC
B3A PICNIC
B19C EPLD OSD
SCART 1
SCART 2
SCART 3
D SIDE I/O
SVHS
CVBS
B14A MMC
CONTROL
DVI-I INPUT CONNECTOR
DVI RECEIVER
7I18 SII907
A/D CONVERTER
SYNC PROC. + CLOCK GENERATOR
SERIAL REGISTER + POWER MAN.
7L01 AD9883AKST
DIPLAY INTERFACE
7001 SAA5801H
SEE ALSO BLOCK DIAGRAM CONTROL
8-BIT ADC
R-OSD (0-5)
G-OSD (0-5)
B-OSD (0-5)
BL-OSD (0-5)

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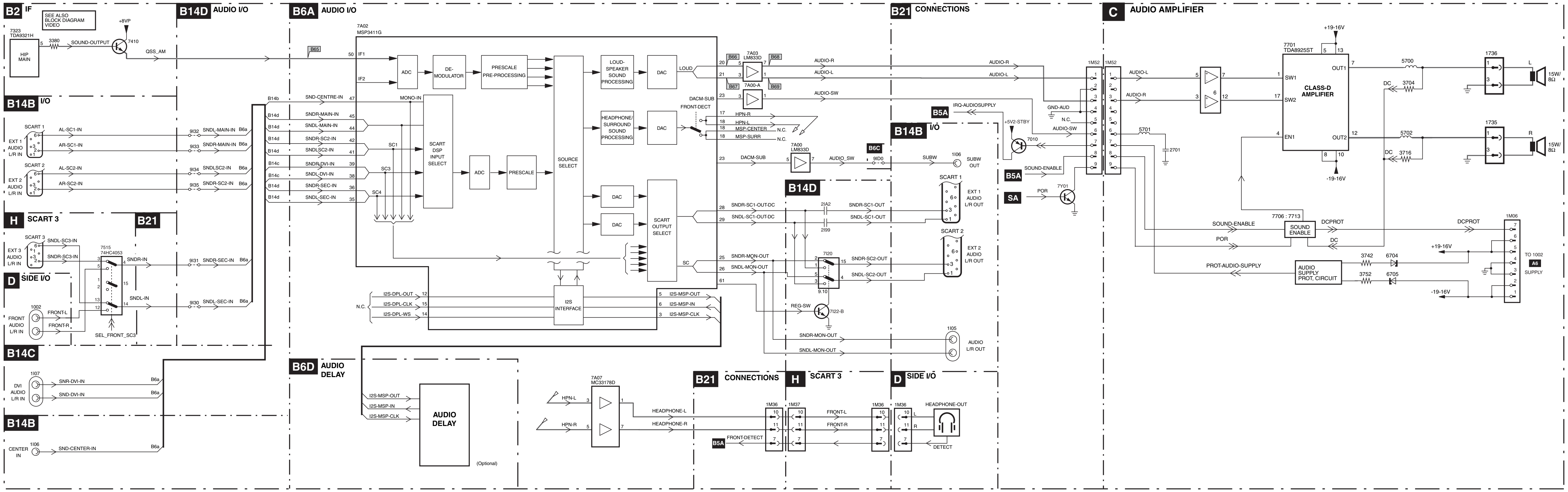
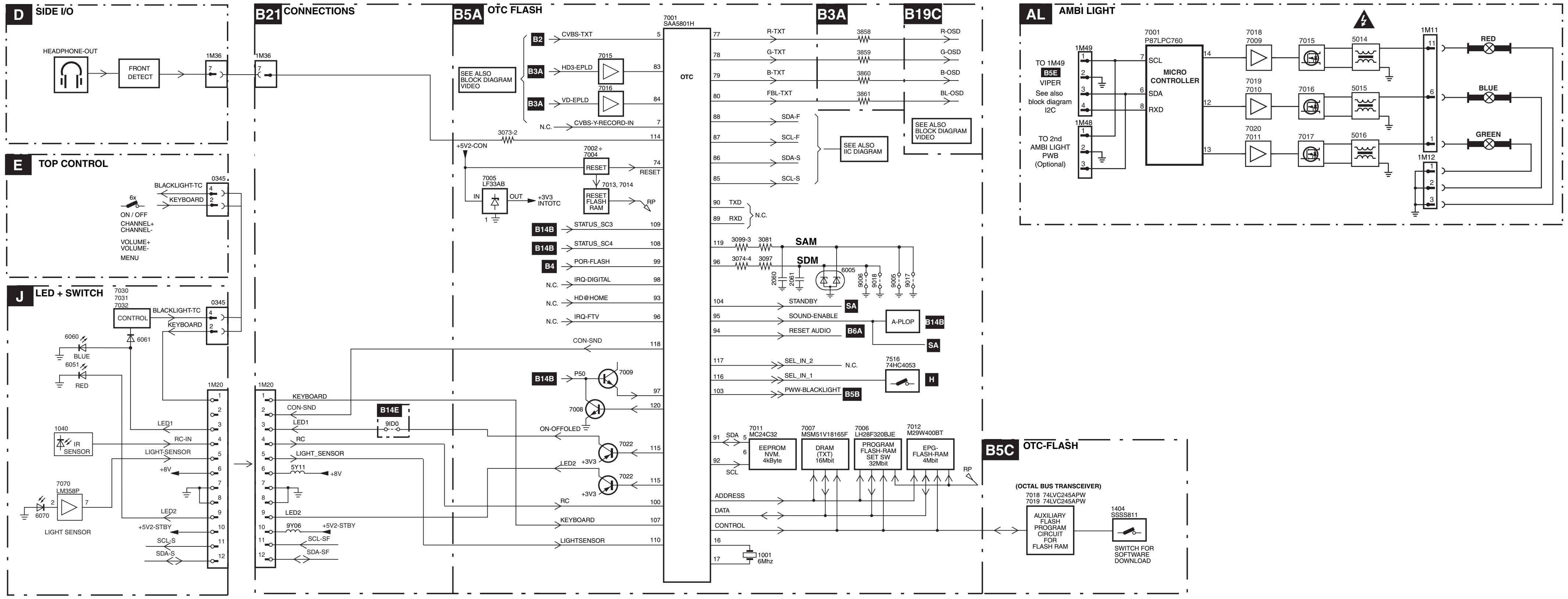
Block Diagram Audio & Control

AUDIO


B2 IF
SEE ALSO BLOCK DIAGRAM VIDEO
7323 TDA9321H
HIP MAIN
SOUND-OUTPUT
7410
QSS_AM
B14D AUDIO I/O
B6A AUDIO I/O
7A02 MSP3411G
ADC
DE-MODULATOR
PRESCALE PRE-PROCESSING
LOUD-SPEAKER SOUND PROCESSING
HEADPHONE/ SURROUND SOUND PROCESSING
DAC
SCART DSP INPUT SELECT
SOURCE SELECT
SCART OUTPUT SELECT
I2S INTERFACE
B14B I/O
EXT 1 AUDIO L/R IN
EXT 2 AUDIO L/R IN
H SCART 3
EXT 3 AUDIO L/R IN
7515 74HC4053
D SIDE I/O
FRONT AUDIO L/R IN
SEL_FRONT_SC3
B14C
DVI AUDIO L/R IN
B14B
CENTER IN
B6D AUDIO DELAY
AUDIO DELAY
(Optional)
B21 CONNECTIONS
7A03 LM833D
AUDIO-R
AUDIO-L
AUDIO-SW
IRQ-AUDIOSUPPLY
B14B I/O
SUBW OUT
SCART 1
EXT 1 AUDIO L/R OUT
SCART 2
EXT 2 AUDIO L/R OUT
7120
7122-B
AUDIO L/R OUT
7A07 MC33178D
HEADPHONE-L
HEADPHONE-R
FRONT-DETECT
H SCART 3
D SIDE I/O
HEADPHONE-OUT
DETECT
C AUDIO AMPLIFIER
7701 TDA8925ST
CLASS-D AMPLIFIER
+19-16V
-19-16V
SOUND ENABLE
AUDIO SUPPLY PROT. CIRCUIT
DCPROT
PROT-AUDIO-SUPPLY
L 15W/ 8Ω
R 15W/ 8Ω
TO 1002 A6 SUPPLY

CONTROL


D SIDE I/O
HEADPHONE-OUT
FRONT DETECT
E TOP CONTROL
BLACKLIGHT-TC
KEYBOARD
ON / OFF
CHANNEL+
CHANNEL-
VOLUME+
VOLUME-
MENU
J LED + SWITCH
CONTROL
BLUE
RED
IR SENSOR
7070 LM358P
LIGHT SENSOR
B21 CONNECTIONS
B5A OTC FLASH
7001 SAA5801H
OTC
SEE ALSO BLOCK DIAGRAM VIDEO
7005 LF33AB
RESET
RESET FLASH RAM
B3A
B19C
R-OSD
G-OSD
B-OSD
BL-OSD
SEE ALSO IIC DIAGRAM
SAM
SDM
STANDBY
SOUND-ENABLE
RESET AUDIO
A-PLOP
7516 74HC4053
7011 MC24C32 EEPROM NVM 4kByte
7007 MSM51V18165F DRAM (TXT) 16Mbit
7006 LH28F320BJE PROGRAM FLASH-RAM SET SW 32Mbit
7012 M29W400BT EPG-FLASH-RAM 4Mbit
1001 6Mhz
B5C OTC-FLASH
(OCTAL BUS TRANSCEIVER)
7018 74LVC245APW
7019 74LVC245APW
AUXILIARY FLASH PROGRAM CIRCUIT FOR FLASH-RAM
1404 SSSS811
SWITCH FOR SOFTWARE DOWNLOAD
AL AMBI LIGHT
TO 1M49 B5E VIPER See also block diagram I2C
TO 2nd AMBI LIGHT PWB (Optional)
7001 P87LPC760
MICRO CONTROLLER
RED
BLUE
GREEN

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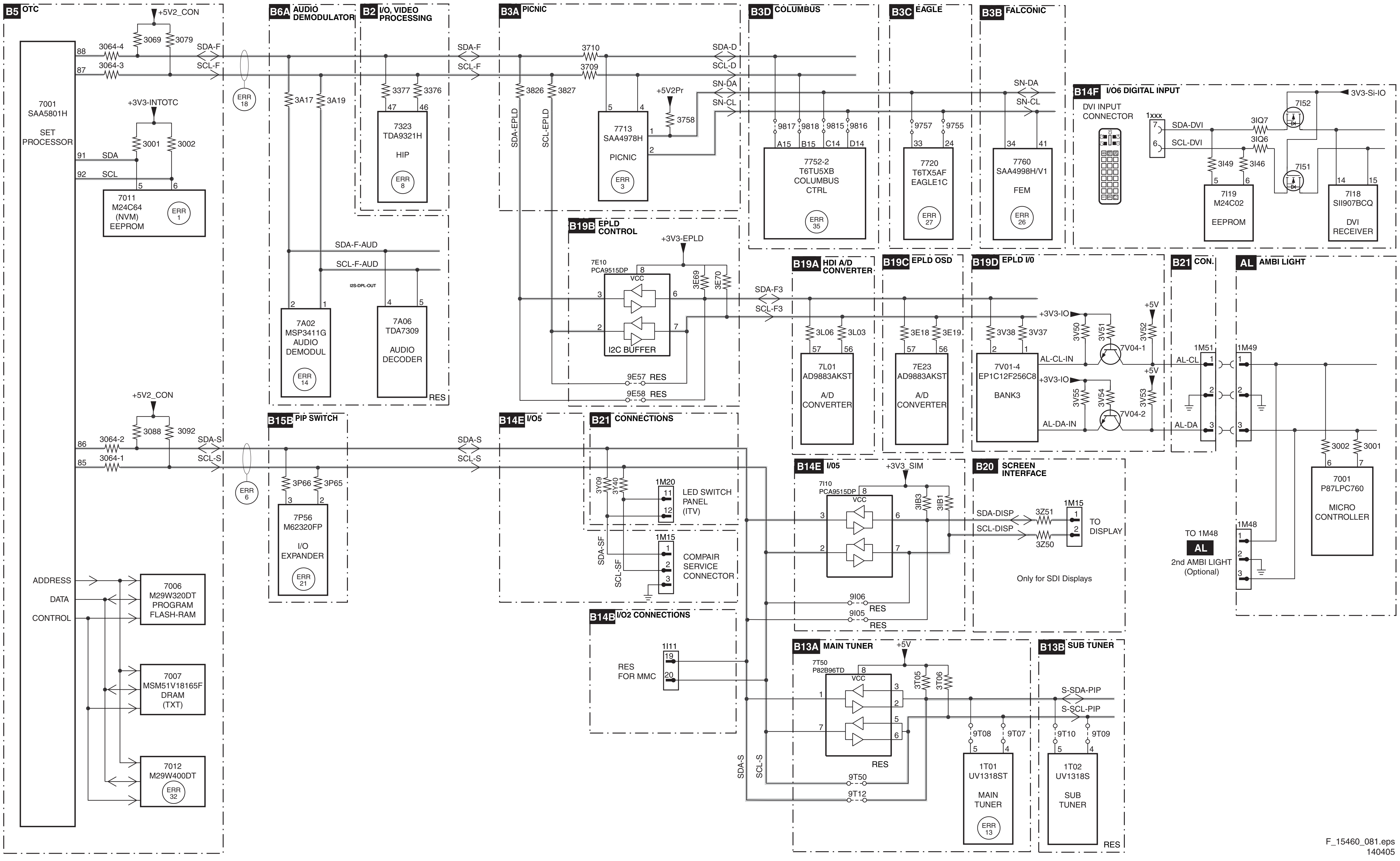
I2C IC's overview

IIC


B5 OTC
+5V2_CON
3069
3079
88
87
3064-4
3064-3
SDA-F
SCL-F
7001
SAA5801H
SET PROCESSOR
+3V3-INTOTC
3001
3002
91 SDA
92 SCL
7011
M24C64 (NVM) EEPROM
ERR 1
ERR 18
B6A AUDIO DEMODULATOR
3A17
3A19
SDA-F-AUD
SCL-F-AUD
I2S-DPL-OUT
7A02
MSP3411G
AUDIO DEMODUL
ERR 14
B2 I/O, VIDEO PROCESSING
3377
3376
7323
TDA9321H
HIP
ERR 8
7A06
TDA7309
AUDIO DECODER
RES
B3A PICNIC
3826
3827
SDA-EPLD
SCL-EPLD
3710
3709
+5V2Pr
3758
7713
SAA4978H
PICNIC
ERR 3
SDA-D
SCL-D
SN-DA
SN-CL
B19B EPLD CONTROL
+3V3-EPLD
7E10
PCA9515DP
VCC
I2C BUFFER
3E69
3E70
9E57 RES
9E58 RES
SDA-F3
SCL-F3
B3D COLUMBUS
9817
9818
9815
9816
A15 B15 C14 D14
7752-2
T6TU5XB
COLUMBUS CTRL
ERR 35
B3C EAGLE
9757
9755
7720
T6TX5AF
EAGLE1C
ERR 27
B3B FALCONIC
7760
SAA4998H/V1
FEM
ERR 26
B14F I/O6 DIGITAL INPUT
DVI INPUT CONNECTOR
1xxx
SDA-DVI
SCL-DVI
3IQ7
3IQ6
3I49
3I46
7I52
7I51
3V3-Si-IO
7I19
M24C02
EEPROM
7I18
SII907BCQ
DVI RECEIVER
B19A HDI A/D CONVERTER
3L06
3L03
7L01
AD9883AKST
A/D CONVERTER
B19C EPLD OSD
3E18
3E19
7E23
AD9883AKST
A/D CONVERTER
B19D EPLD I/0
3V38
3V37
7V01-4
EP1C12F256C8
BANK3
+3V3-IO
3V50
3V51
3V52
+5V
7V04-1
7V04-2
AL-CL-IN
AL-DA-IN
3V55
3V54
3V53
B21 CON.
1M51
AL-CL
AL-DA
AL AMBI LIGHT
1M49
3002
3001
7001
P87LPC760
MICRO CONTROLLER
TO 1M48
AL
2nd AMBI LIGHT (Optional)
1M48
+5V2_CON
3088
3092
86
85
3064-2
3064-1
SDA-S
SCL-S
ERR 6
B15B PIP SWITCH
3P66
3P65
7P56
M62320FP
I/O EXPANDER
ERR 21
B14E I/O5
B21 CONNECTIONS
3Y09
3Y40
1M20
LED SWITCH PANEL (ITV)
SDA-SF
SCL-SF
1M15
COMPAIR SERVICE CONNECTOR
B14E I/O5
+3V3_SIM
7I10
PCA9515DP
3IB3
3IB1
9I06 RES
9I05 RES
B20 SCREEN INTERFACE
SDA-DISP
SCL-DISP
3Z51
3Z50
1M15
TO DISPLAY
Only for SDI Displays
ADDRESS
DATA
CONTROL
7006
M29W320DT
PROGRAM FLASH-RAM
7007
MSM51V18165F
DRAM (TXT)
7012
M29W400DT
ERR 32
B14B I/O2 CONNECTIONS
1I11
RES FOR MMC
B13A MAIN TUNER
+5V
7T50
P82B96TD
3T05
3T06
9T08
9T07
9T50
9T12
RES
1T01
UV1318ST
MAIN TUNER
ERR 13
B13B SUB TUNER
S-SDA-PIP
S-SCL-PIP
9T10
9T09
1T02
UV1318S
SUB TUNER
RES
F_15460_081.eps
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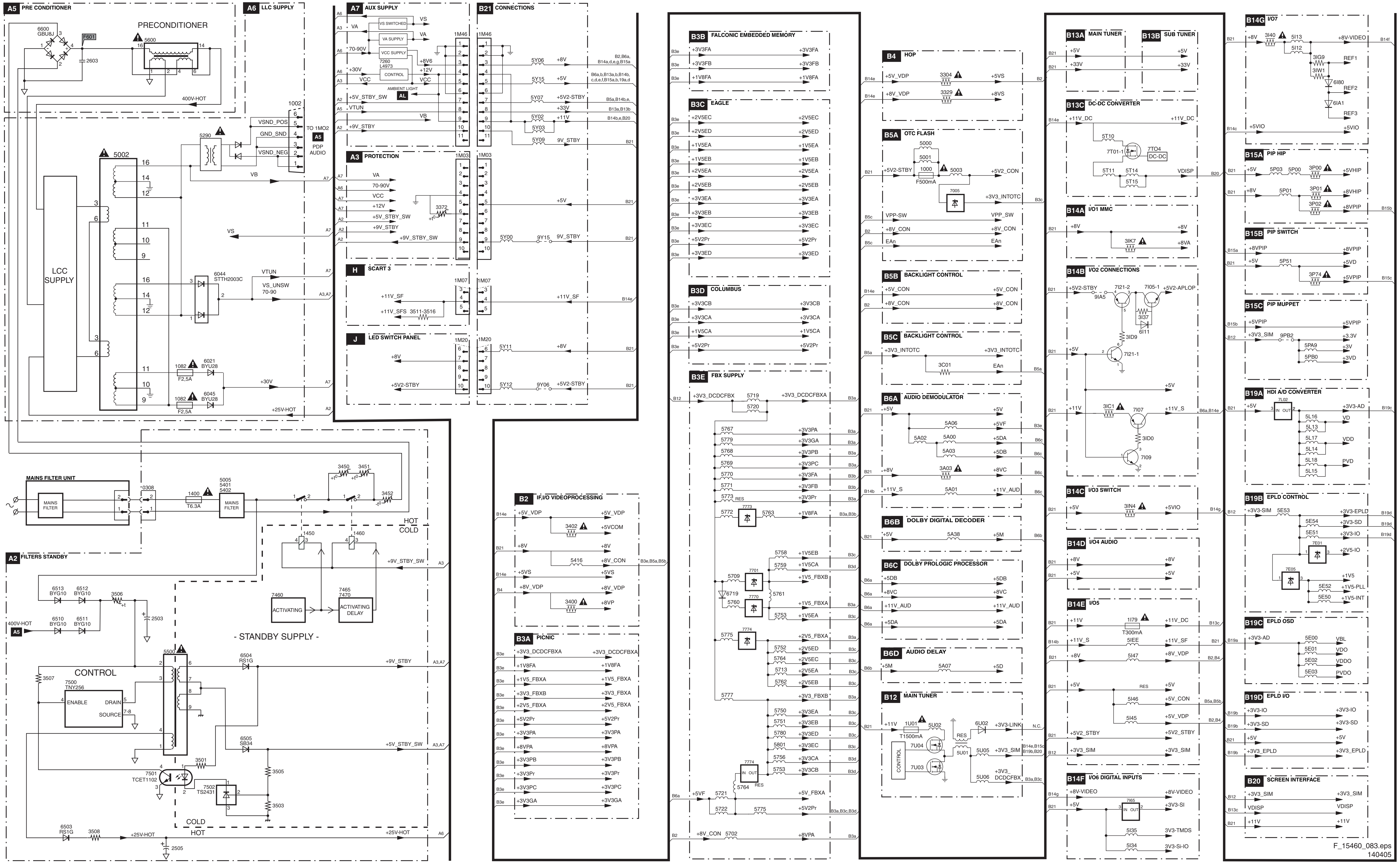
Supply Lines Overview FHP

SUPPLY LINES OVERVIEW FHP 42"


A5 PRE CONDITIONER
PRECONDITIONER
A6 LLC SUPPLY
LCC SUPPLY
A7 AUX SUPPLY
B21 CONNECTIONS
A3 PROTECTION
H SCART 3
J LED SWITCH PANEL
MAINS FILTER UNIT
MAINS FILTER
A2 FILTERS STANDBY
CONTROL
- STANDBY SUPPLY -
ACTIVATING
ACTIVATING DELAY
HOT
COLD
B2 IF,I/O VIDEOPROCESSING
B3A PICNIC
B3B FALCONIC EMBEDDED MEMORY
B3C EAGLE
B3D COLUMBUS
B3E FBX SUPPLY
B4 HOP
B5A OTC FLASH
B5B BACKLIGHT CONTROL
B5C BACKLIGHT CONTROL
B6A AUDIO DEMODULATOR
B6B DOLBY DIGITAL DECODER
B6C DOLBY PROLOGIC PROCESSOR
B6D AUDIO DELAY
B12 MAIN TUNER
B13A MAIN TUNER
B13B SUB TUNER
B13C DC-DC CONVERTER
B14A I/O1 MMC
B14B I/O2 CONNECTIONS
B14C I/O3 SWITCH
B14D I/O4 AUDIO
B14E I/O5
B14F I/O6 DIGITAL INPUTS
B14G I/O7
B15A PIP HIP
B15B PIP SWITCH
B15C PIP MUPPET
B19A HDI A/D CONVERTER
B19B EPLD CONTROL
B19C EPLD OSD
B19D EPLD I/O
B20 SCREEN INTERFACE
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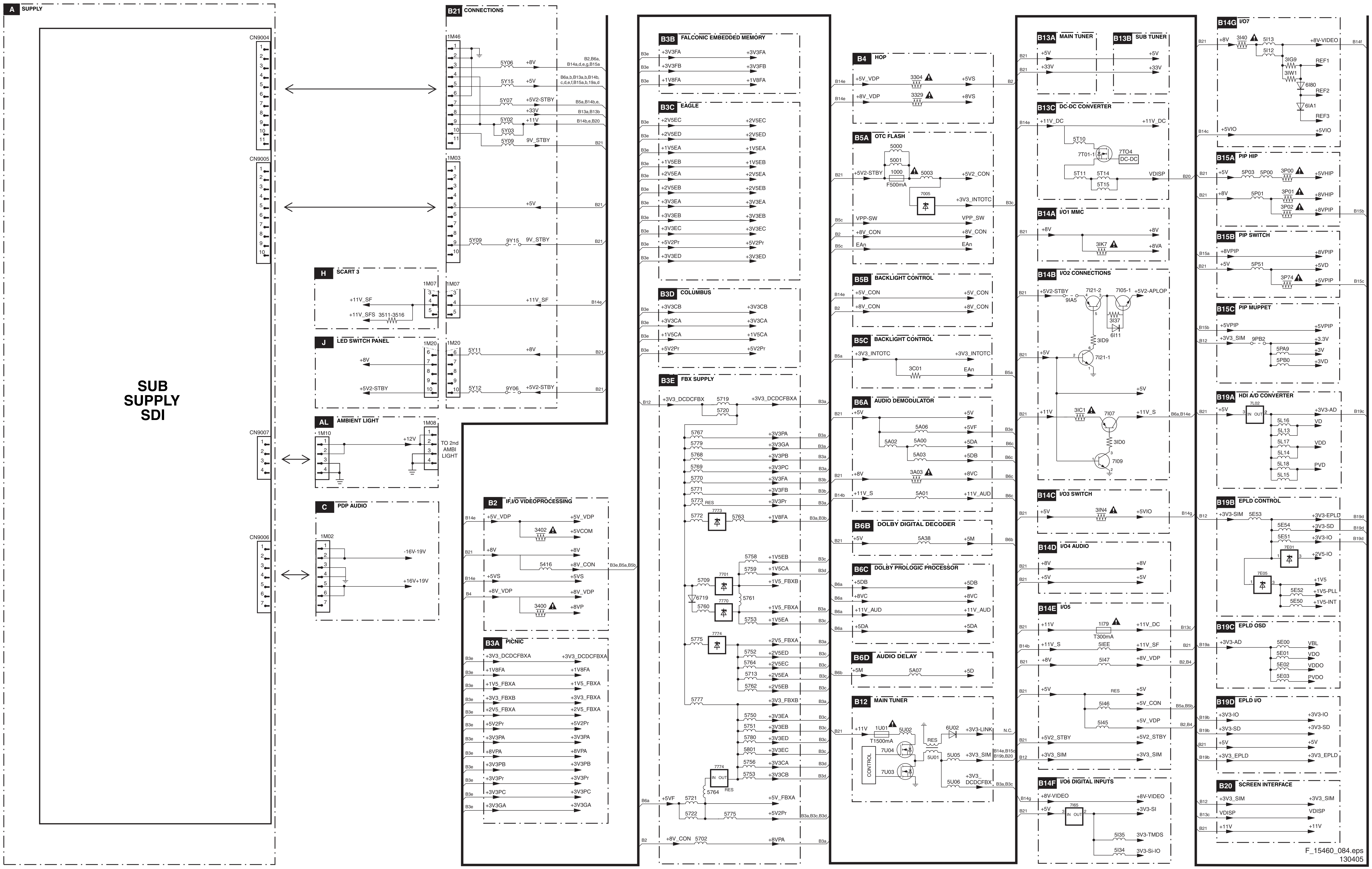
140405

Supply Lines Overview SDI

SUPPLY LINES OVERVIEW SDI 42" / 50"


A SUPPLY
SUB SUPPLY SDI
CN9004
CN9005
CN9007
CN9006
B21 CONNECTIONS
H SCART 3
J LED SWITCH PANEL
AL AMBIENT LIGHT
TO 2nd AMBI LIGHT
C PDP AUDIO
B2 IF,I/O VIDEOPROCESSING
B3A PICNIC
B3B FALCONIC EMBEDDED MEMORY
B3C EAGLE
B3D COLUMBUS
B3E FBX SUPPLY
B4 HOP
B5A OTC FLASH
B5B BACKLIGHT CONTROL
B5C BACKLIGHT CONTROL
B6A AUDIO DEMODULATOR
B6B DOLBY DIGITAL DECODER
B6C DOLBY PROLOGIC PROCESSOR
B6D AUDIO DELAY
B12 MAIN TUNER
B13A MAIN TUNER
B13B SUB TUNER
B13C DC-DC CONVERTER
B14A I/O1 MMC
B14B I/O2 CONNECTIONS
B14C I/O3 SWITCH
B14D I/O4 AUDIO
B14E I/O5
B14F I/O6 DIGITAL INPUTS
B14G I/O7
B15A PIP HIP
B15B PIP SWITCH
B15C PIP MUPPET
B19A HDI A/D CONVERTER
B19B EPLD CONTROL
B19C EPLD OSD
B19D EPLD I/O
B20 SCREEN INTERFACE
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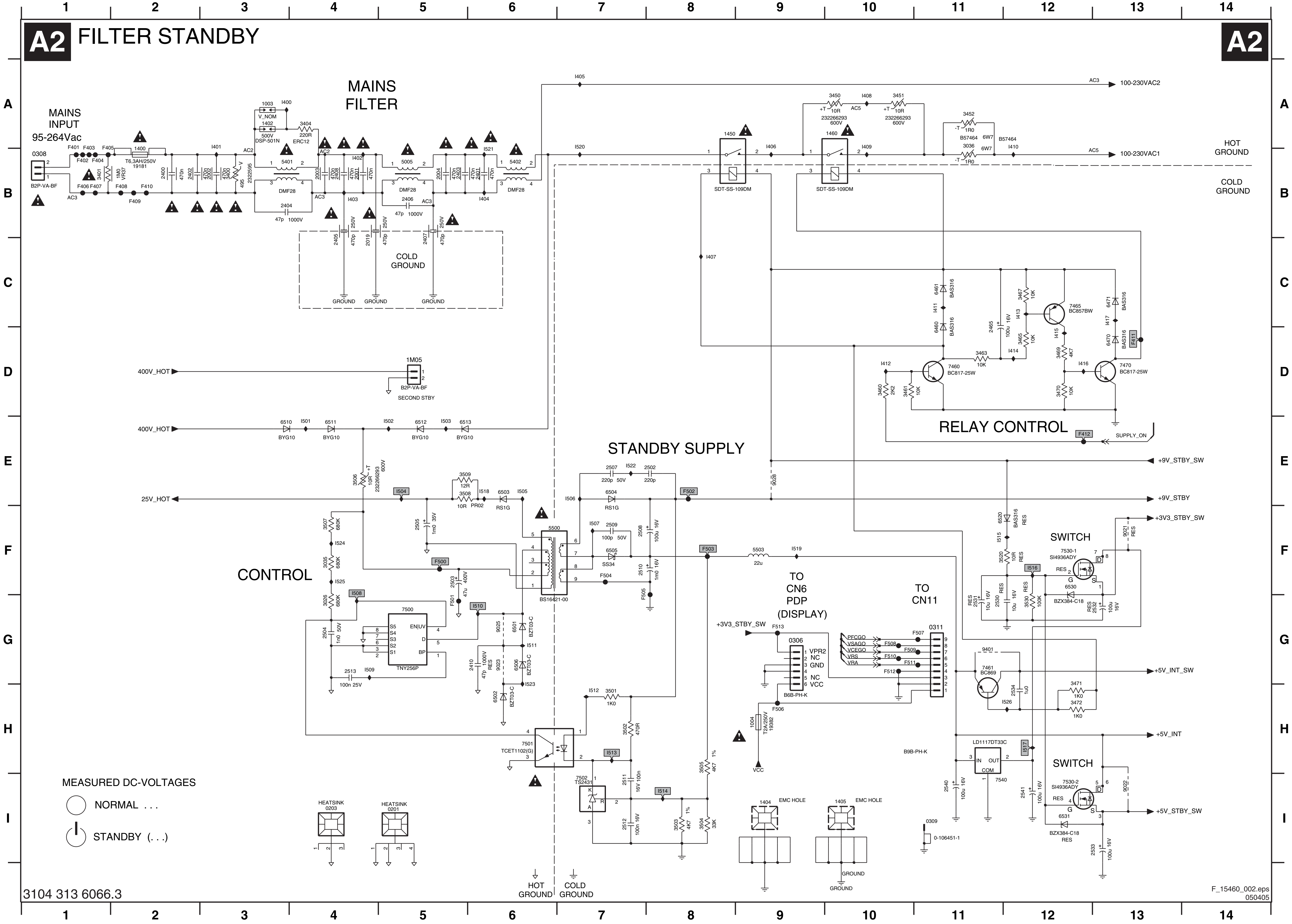
7. Circuit Diagrams and PWB Layouts

PDP Supply Panel: Filter Standby


A2 FILTER STANDBY
A2
MAINS INPUT 95-264Vac
MAINS FILTER
COLD GROUND
HOT GROUND
100-230VAC2
100-230VAC1
RELAY CONTROL
SUPPLY_ON
STANDBY SUPPLY
CONTROL
400V_HOT
25V_HOT
SECOND STBY
+9V_STBY_SW
+9V_STBY
+3V3_STBY_SW
+5V_INT_SW
+5V_INT
+5V_STBY_SW
SWITCH
TO CN6 PDP (DISPLAY)
TO CN11
MEASURED DC-VOLTAGES
NORMAL . . .
STANDBY (. . .)
HEATSINK 0203
HEATSINK 0201
EMC HOLE
GROUND
SDT-SS-109DM
TNY256P
BS16421-00
TCET1102(G)
LD1117DT33C
3104 313 6066.3
F_15460_002.eps
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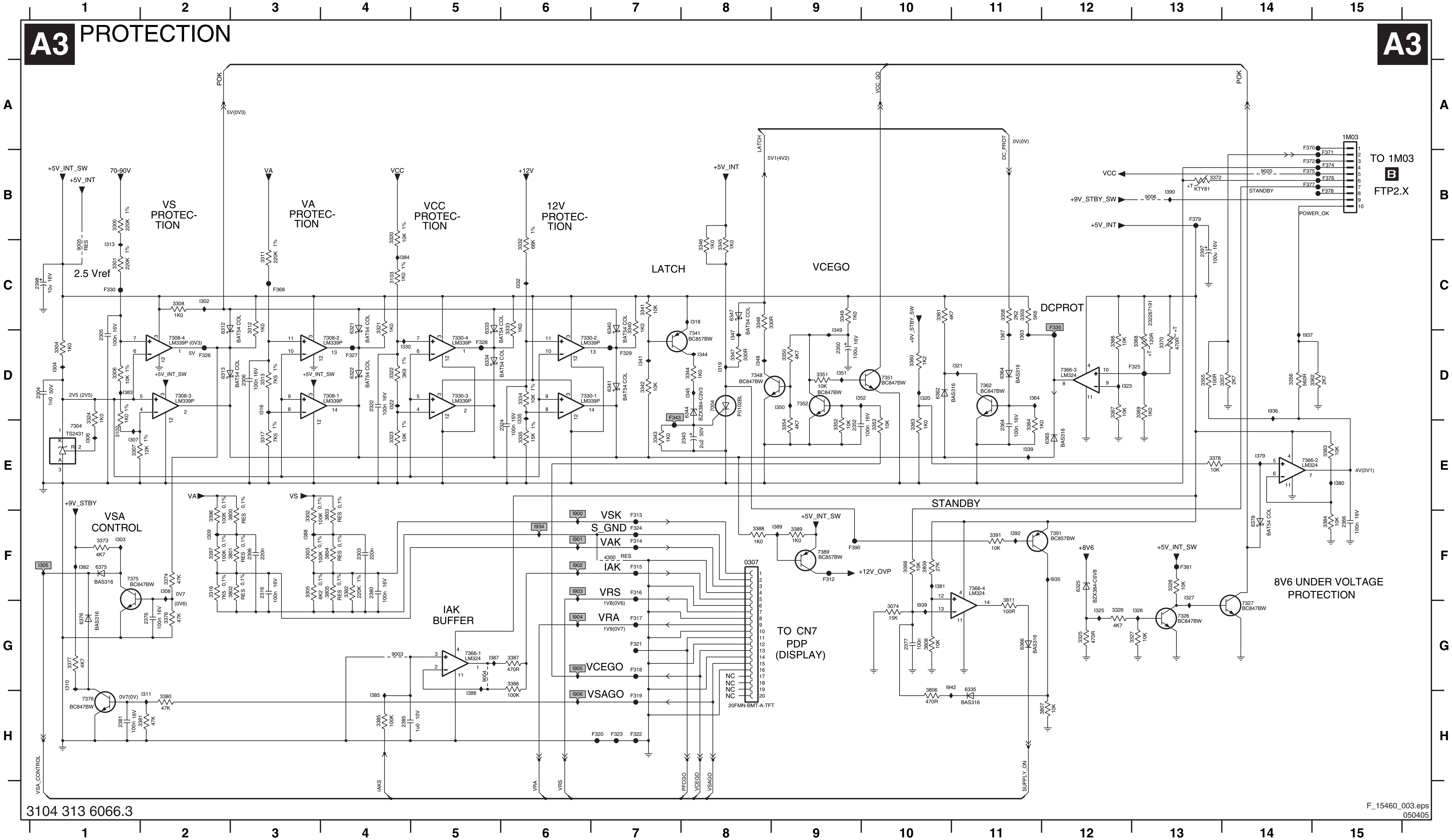
0201	I5
0203	I4
0306	G9
0308	B1
0309	I11
0311	G11
1003	A3
1004	H9
1400	B2
1402	A3
1404	I9
1405	I10
1450	A8
1460	A10
1M05	D5
2001	B4
2002	B3
2003	B4
2004	B5
2019	C4
2400	B2
2401	B6
2402	B2
2403	B5
2404	B3
2405	C4
2406	B5
2407	C5
2408	B4
2410	G6
2465	C11
2502	E8
2503	F5
2504	G4
2505	F5
2507	E7
2508	F7
2509	F7
2510	F7
2511	I7
2512	I7
2513	G4
2530	G11
2531	G11
2532	G13
2533	I13
2534	H12
2540	I11
2541	I12
3026	G4
3035	F4
3036	A11
3400	B3
3401	B1
3404	A4
3450	A10
3451	A10
3452	A11
3460	D10
3461	D10
3463	D11
3465	D12
3467	C12
3469	D12
3470	D12
3471	G12
3472	H12
3501	H7
3502	H7
3503	I8
3504	I8
3505	H8
3506	E4
3507	F4
3508	E5
3509	E5
3520	F11
3530	G12
5005	B5
5401	B3
5402	B6
5500	F6
5503	F9
6460	D11
6461	C11
6470	D13
6471	C13
6501	G6
6502	H6
6503	E6
6504	E7
6505	F7
6506	G6
6510	E3
6511	E4
6512	E5
6513	E5
6520	F11
6530	F12
6531	I12
7460	D11
7461	G11
7465	C12
7470	D13
7500	G5
7501	H6
7502	I7
7530-1	F12
7530-2	I12
7540	I11
9021	F13
9022	I13
9023	G6
9025	G6
9028	E9
9401	G11
F401	B1
F402	B1
F403	B1
F404	B1
F405	B1
F406	B1
F407	B1
F408	B2
F409	B2
F410	B2
F411	D13
F412	E12
F500	F5
F501	G5
F502	E8
F503	F8
F504	F7
F505	F7
F506	H9
F507	G11
F508	G10
F509	G10
F510	G10
F511	G10
F512	G10
F513	G9
I400	A3
I401	A3
I402	B4
I403	B4
I404	B6
I405	A7
I406	A9
I407	C8
I408	A10
I409	A10
I410	A12
I411	C11
I412	D10
I413	C12
I414	D12
I415	D12
I416	D12
I417	C13
I501	E4
I502	E5
I503	E5
I504	E5
I505	E6
I506	E7
I507	F7
I508	F4
I509	G4
I510	G6
I511	G6
I512	H7
I513	H7
I514	I8
I515	F11
I516	F12
I517	H12
I518	E6
I519	F9
I520	A7
I521	B6
I522	E7
I523	G6
I524	F4
I525	F4
I526	H12

PDP Supply Panel: Protection

0307	F8
1M03	A15
2303	F4
2304	D1
2305	D1
2306	D3
2316	F3
2322	D4
2324	E5
2343	E8
2350	D9
2352	E9
2364	E11
2366	F15
2376	G2
2377	G10
2380	F4
2381	H1
2385	H4
2396	F3
2397	C13
2398	C1
3068	F10
3074	G9
3102	E1
3103	C4
3300	B1
3301	C1
3302	F3
3303	F3
3304	D1
3305	F3
3306	D1
3307	E1
3308	C2
3311	C3
3312	C3
3313	D3
3316	F2
3317	E3
3320	B4
3321	C4
3322	D4
3323	E4
3324	D1
3325	G12
3326	G12
3327	G13
3328	F13
3332	C6
3333	C6
3334	D6
3335	E6
3340	C7
3341	C7
3342	D7
3343	E7
3344	D8
3345	C8
3346	C8
3347	D8
3348	C8
3349	C9
3350	D9
3351	D9
3352	E9
3353	E10
3354	E9
3355	D13
3356	D14
3357	D14
3358	C11
3359	C11
3360	D10
3361	C10
3362	D15
3363	E10
3364	E11
3366	D12
3367	D12
3368	D13
3369	D13
3370	D13
3372	B13
3373	F1
3374	F2
3376	G2
3377	G1
3378	E13
3380	H2
3381	H2
3382	F4
3383	E15
3384	F15
3385	H4
3386	G6
3387	G6
3388	F8
3389	F9
3391	F11
3396	F2
3397	F2
3800	F3
3801	F3
3802	F3
3803	F4
3804	F4
3805	F4
3806	H10
3807	H11
3808	G10
3809	F10
3811	G11
4300	F7
6312	C2
6313	D2
6321	C4
6322	D4
6325	F12
6333	C5
6334	D5
6335	H10
6340	C7
6341	D7
6344	D8
6347	C8
6362	D10
6364	D11
6365	E12
6366	G11
6375	F1
6376	G1
6378	F14
7004	D8
7304	E1
7308-1	D4
7308-2	D4
7308-3	D2
7308-4	D2
7326	G13
7327	G14
7330-1	D6
7330-2	D6
7330-3	D5
7330-4	D5
7341	D8
7348	D8
7351	D10
7352	D9
7362	D11
7366-1	G5
7366-2	E14
7366-3	D12
7366-4	F10
7375	F1
7376	H1
7389	F9
7391	F11
9003	G4
9004	G5
9005	C1
9006	B13
9020	B14
F312	F9
F313	F7
F314	F7
F315	F7
F316	F7
F317	G7
F318	G7
F319	H7
F320	H7
F321	G7
F322	H7
F323	H7
F324	F7
F325	D13
F326	D2
F327	D4
F328	D5
F329	D7
F330	C1
F335	C12
F343	D7
F368	C3
F370	A14
F371	B15
F372	B14
F374	B15
F375	B14
F376	B15
F377	B14
F378	B15
F379	B13
F381	F13
F390	F9
I302	C2
I303	F1
I304	D1
I305	F1
I306	E1
I307	E1
I308	F2
I309	F2
I310	G1
I311	H2
I313	C1
I316	D3
I318	C8
I319	D8
I320	D10
I321	D11
I322	D4
I323	D12
I325	G12
I326	G13
I327	F13
I330	D4
I332	C6
I335	D6
I339	E11
I341	D7
I344	D8
I345	D8
I347	D8
I348	D8
I349	C9
I350	D9
I351	D9
I352	D9
I363	D11
I364	D11
I367	D11
I379	E14
I380	E15
I381	F10
I382	F1
I383	D1
I384	C4
I385	H4
I386	H5
I387	G5
I388	F3
I389	F9
I390	B13
I392	F11
I900	F6
I901	F6
I902	F6
I903	F6
I904	G6
I905	G6
I906	H6
I934	F6
I935	F11
I936	D14
I937	D14
I939	G10
I942	G10


A3
PROTECTION
VS PROTEC-TION
VA PROTEC-TION
VCC PROTEC-TION
12V PROTEC-TION
LATCH
VCEGO
DCPROT
2.5 Vref
VSA CONTROL
IAK BUFFER
STANDBY
TO CN7 PDP (DISPLAY)
TO 1M03
B
FTP2.X
8V6 UNDER VOLTAGE PROTECTION
+5V_INT_SW
+5V_INT
70-90V
VA
VCC
+12V
+9V_STBY
+9V_STBY_SW
+8V6
POK
VCC_GO
LATCH
DC_PROT
STANDBY
POWER_OK
VSK
S_GND
VAK
IAK
VRS
VRA
VCEGO
VSAGO
+12V_OVP
4V(0V1)
VSA_CONTROL
IAKS
VRA
VRS
PFCGO
VCEGO
VSAGO
SUPPLY_ON
0307
20FMN-BMT-A-TFT
1M03
7308-4 LM339P
7308-3 LM339P
7308-2 LM339P
7308-1 LM339P
7330-4 LM339P
7330-3 LM339P
7330-2 LM339P
7330-1 LM339P
7366-1 LM324
7366-2 LM324
7366-3 LM324
7366-4 LM324
7304 TS2431
7341 BC857BW
7348 BC847BW
7351 BC847BW
7352 BC847BW
7362 BC847BW
7375 BC847BW
7376 BC847BW
7389 BC857BW
7391 BC857BW
7326 BC847BW
7327 BC847BW
7004 P0102BL
KTY81
BAT54 COL
BAS316
BZX384-C3V3
BZX384-C6V8

3104 313 6066.3

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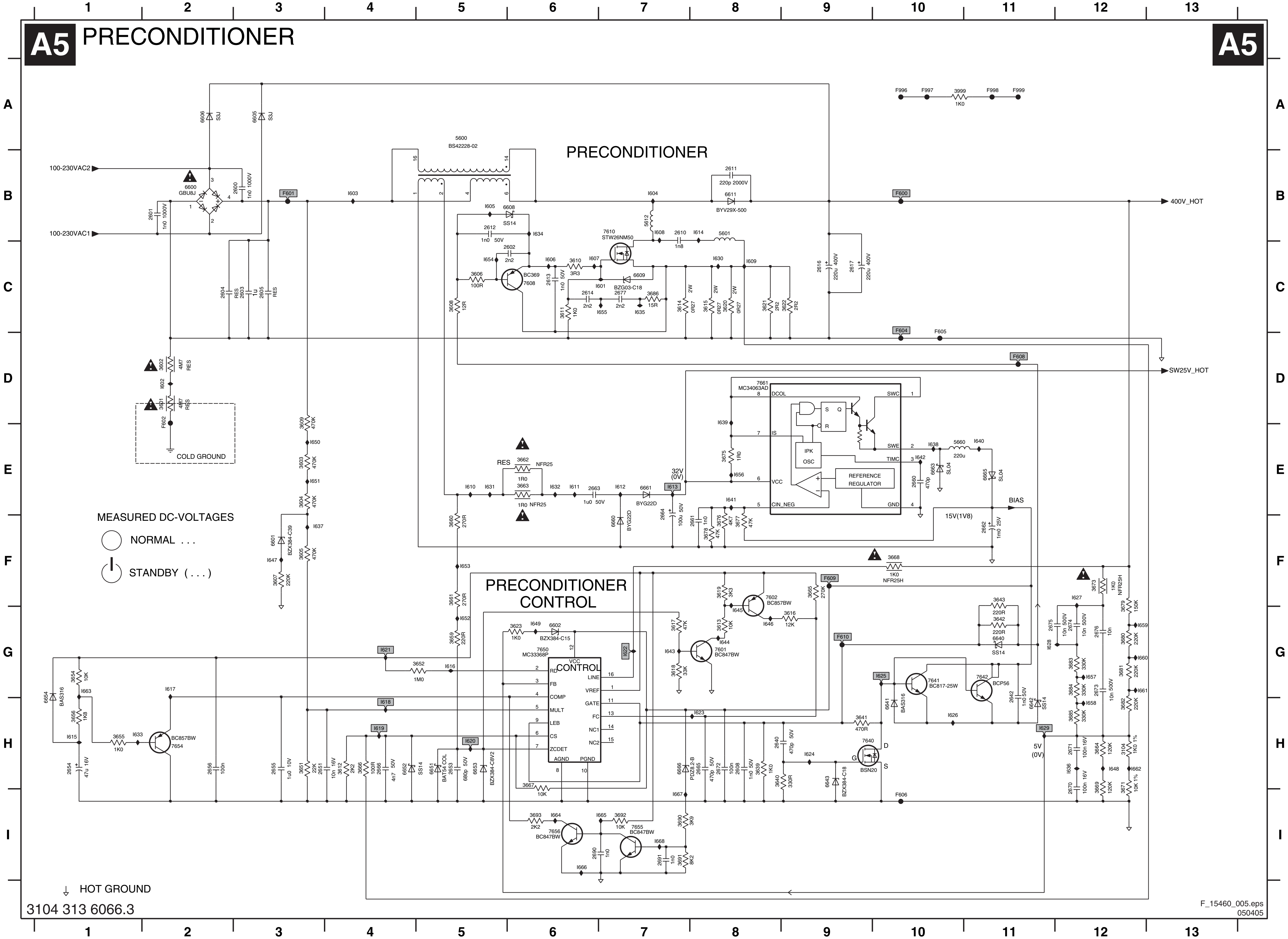
PDP Supply Panel: Pre-Conditioner


A5 PRECONDITIONER
A5
PRECONDITIONER
PRECONDITIONER CONTROL
100-230VAC2
100-230VAC1
400V_HOT
SW25V_HOT
BIAS
15V(1V8)
32V (0V)
5V (0V)
6600 GBU8J
5600 BS42228-02
7610 STW26NM50
7608 BC369
6611 BYV29X-500
7661 MC34063AD
REFERENCE REGULATOR
7650 MC33368P
CONTROL
7602 BC857BW
7601 BC847BW
7641 BC817-25W
7642 BCP56
7640 BSN20
7654 BC857BW
7656 BC847BW
7655 BC847BW
COLD GROUND
MEASURED DC-VOLTAGES
NORMAL . . .
STANDBY (. . .)
HOT GROUND
3104 313 6066.3
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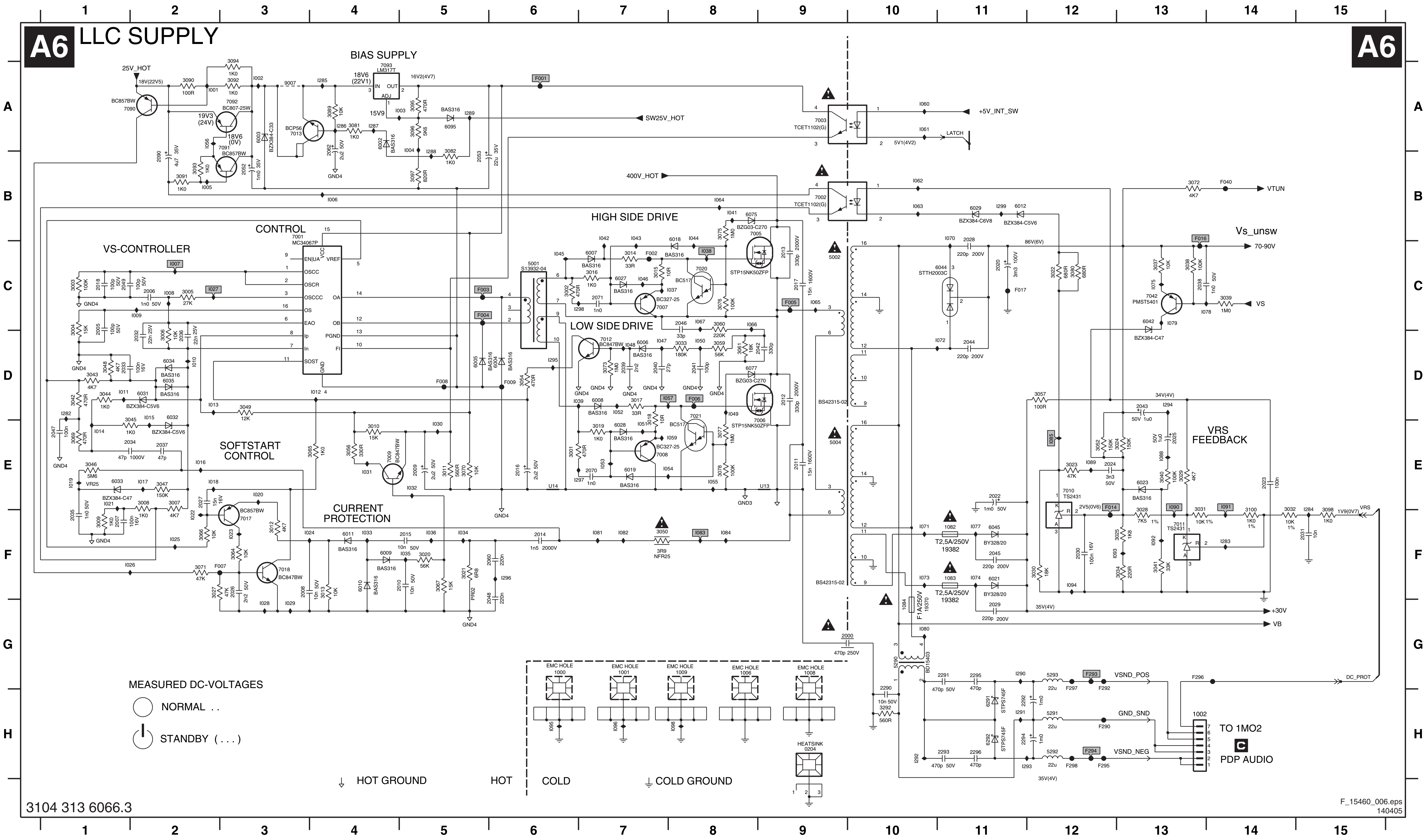
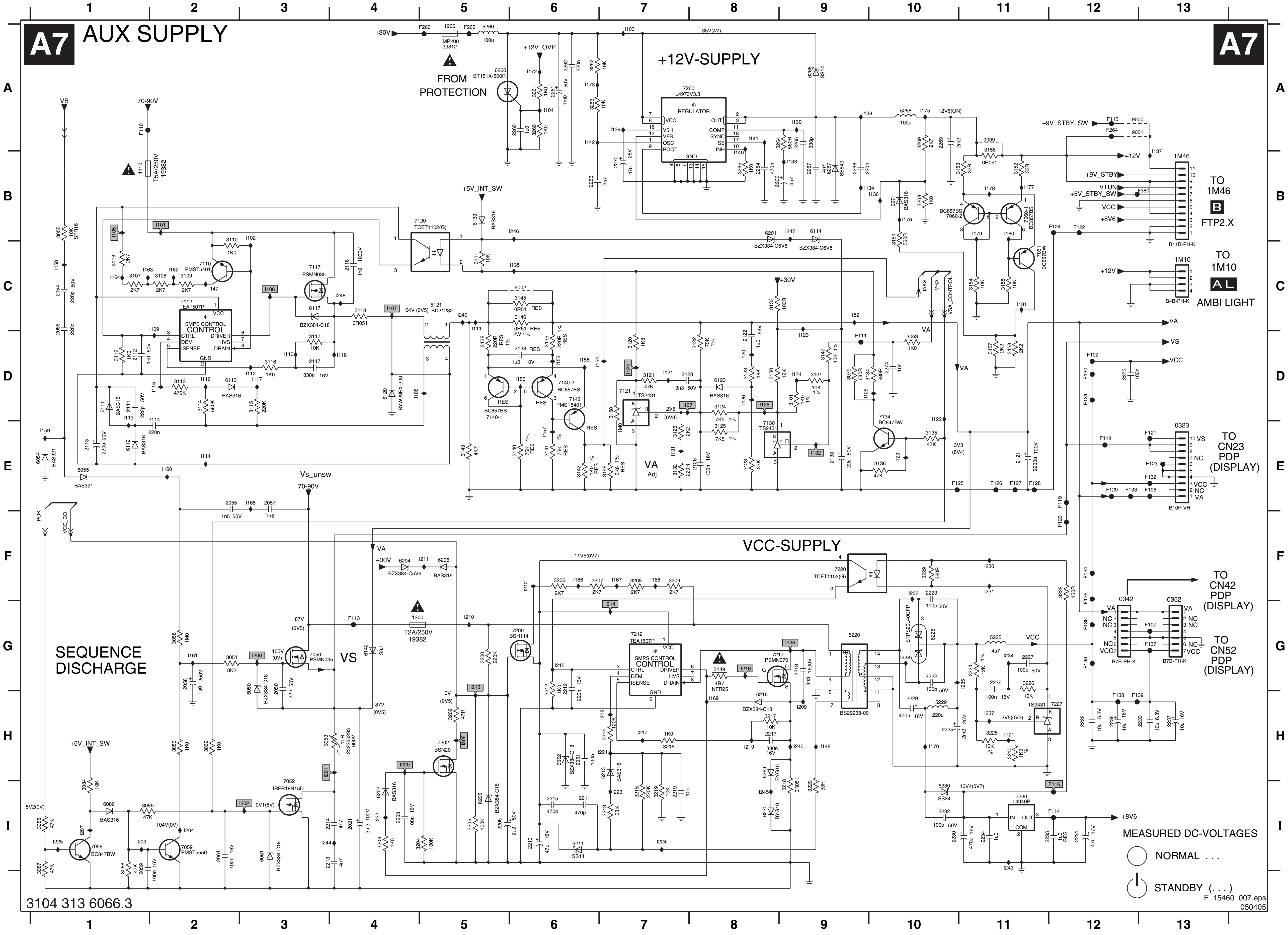
2600	B3
2601	B2
2602	C6
2603	C3
2604	C2
2605	C3
2608	H8
2610	B7
2611	B8
2612	B5
2613	C6
2614	C6
2616	C9
2617	C9
2640	H8
2642	G11
2651	H3
2653	H5
2654	H1
2655	H3
2656	H2
2660	E10
2661	F8
2662	F11
2663	E6
2664	E7
2665	H8
2666	H4
2670	H12
2671	H12
2672	H8
2673	G12
2674	G12
2675	G11
2676	G12
2677	C7
2690	I6
2691	I7
3104	H12
3601	D2
3602	D2
3603	E3
3604	E3
3605	F3
3606	C5
3607	F3
3608	C5
3609	D3
3610	C6
3611	C6
3612	H4
3613	G8
3614	C7
3615	C8
3616	G9
3617	G7
3618	G7
3619	F8
3620	C8
3621	C8
3622	C9
3623	G6
3639	H8
3640	H8
3641	H9
3642	G11
3643	F11
3651	H3
3652	G5
3654	G1
3655	H1
3656	H1
3659	G5
3660	F5
3661	F5
3662	E6
3663	E6
3664	H12
3665	F9
3666	H4
3667	H6
3668	F10
3669	H12
3671	H12
3673	F12
3675	E8
3676	F8
3677	F8
3678	F8
3679	F12
3680	G12
3681	G12
3682	H12
3683	G12
3684	G12
3685	H12
3686	C7
3690	I7
3691	I7
3692	I7
3693	I6
3999	A10
5600	A5
5601	B8
5612	B7
5660	E10
6600	B2
6601	F3
6602	G6
6605	A3
6606	A2
6608	B6
6609	C7
6611	B8
6640	G11
6641	H10
6642	H11
6643	H9
6651	H5
6652	H4
6653	H5
6654	G1
6660	F7
6661	E7
6663	E10
6665	E11
6666	H7
7601	G8
7602	F8
7608	C6
7610	B7
7640	H9
7641	G10
7642	G11
7650	G6
7654	H2
7655	I7
7656	I6
7661	D8
F600	B10
F601	B3
F602	D2
F604	C10
F605	D10
F606	I10
F608	D11
F609	F9
F610	G9
F996	A10
F997	A10
F998	A11
F999	A11
I601	C7
I602	D2
I603	B4
I604	B7
I605	B5
I606	C6
I607	C6
I608	B7
I609	C8
I610	E5
I611	E6
I612	E7
I613	E7
I614	B8
I615	H1
I616	G5
I617	G2
I618	H4
I619	H4
I620	H5
I621	G4
I622	G7
I623	H8
I624	H9
I625	G10
I626	H10
I627	F12
I628	G11
I629	H11
I630	C8
I631	E5
I632	E6
I633	H1
I634	B6
I635	C7
I636	H12
I637	F3
I638	E10
I639	D8
I640	E11
I641	E8
I642	E10
I643	G7
I644	G8
I645	G8
I646	G8
I647	F3
I648	H12
I649	G6
I650	E3
I651	E3
I652	G5
I653	F5
I654	C5
I655	C7
I656	E8
I657	G12
I658	H12
I659	G12
I660	G12
I661	G12
I662	H12
I663	G1
I664	I6
I665	I7
I666	I6
I667	I7
I668	I7

PDP Supply Panel: LLC Supply

U13 E9
U14 E6
0204 H9
1000 G6
1001 G7
1002 H14
1006 G8
1008 G9
1009 G8
1082 F11
1083 F11
1084 G10
2000 G9
2005 C1
2006 C2
2007 F1
2008 F3
2009 E5
2010 F5
2011 E9
2012 D9
2013 C9
2014 F6
2015 F5
2016 E6
2017 C9
2018 C1
2020 C11
2022 E11
2023 E14
2024 E12
2025 E13
2026 F3
2027 E2
2028 C11
2029 G11
2030 F12
2031 F15
2032 D2
2033 D1
2034 E1
2035 F1
2036 D2
2037 E2
2038 C13
2039 D7
2040 D7
2041 D8
2042 D9
2043 D13
2044 D11
2045 F11
2046 C8
2047 E1
2048 F6
2049 C1
2052 B3
2053 B5
2060 F6
2062 A4
2070 E7
2071 C7
2090 B2
2290 H10
2291 G11
2292 H11
2293 H11
2294 H11
2295 G11
2296 H11
3001 E6
3002 C6
3003 C1
3004 C1
3005 C2
3006 D2
3007 E2
3008 E2
3009 F1
3010 E4
3011 E5
3012 F3
3013 F4
3014 C7
3015 C7
3016 C7
3017 D7
3018 D7
3019 E7
3020 F5
3021 F5
3022 C12
3023 E12
3024 E13
3025 F13
3027 F2
3028 F13
3029 E13
3030 F12
3031 F13
3032 F14
3033 D8
3034 F13
3037 C13
3038 C13
3039 C14
3040 E13
3041 F13
3042 D1
3043 D1
3044 D1
3045 E2
3046 E1
3047 E2
3048 D1
3049 D3
3050 F7
3052 E12
3054 D6
3056 E4
3057 D12
3059 D8
3060 C8
3061 D8
3064 F3
3065 E4
3066 F2
3067 F5
3069 E1
3070 E5
3071 F2
3072 B13
3073 D7
3075 B8
3076 C8
3077 E8
3078 E8
3080 C12
3081 A4
3082 B5
3089 A4
3090 A2
3091 B2
3092 A3
3093 B2
3094 A3
3095 A5
3096 A5
3097 B5
3098 F15
3100 F14
3292 H10
5001 C6
5002 C9
5004 E9
5290 G10
5291 H12
5292 H12
5293 G12
6002 A4
6003 A3
6004 D6
6005 D5
6006 D7
6007 C7
6008 D7
6009 F4
6010 F4
6011 F4
6012 B11
6018 C8
6019 E7
6021 F11
6023 E13
6027 C7
6028 E7
6029 B11
6031 D2
6032 D2
6033 E1
6034 D2
6035 D2
6042 C13
6044 C11
6045 F11
6075 B8
6077 D8
6095 A5
6291 H11
6292 H11
7001 B3
7002 B9
7003 A9
7005 B8
7006 E8
7007 C7
7008 E7
7009 E4
7010 E12
7011 F13
7012 D7
7013 A3
7017 F3
7018 F3
7020 C8
7021 D8
7042 C13
7090 A2
7091 A3
7092 A3
7093 A4
9007 A3
F001 A6
F002 C7
F003 C5
F004 C5
F005 C9
F006 D8
F007 F3
F008 D5
F009 D6
F014 E12
F016 B13
F017 C11
F040 B14
F290 H12
F292 H12
F293 G12
F294 H12
F295 H12
F296 G13
F297 H12
F298 H12
I001 A2
I002 A3
I003 A5
I004 A5
I005 B2
I006 B4
I007 C2
I008 C2
I009 C2
I010 D2
I011 D1
I012 D4
I013 D2
I014 E1
I015 D2
I016 E2
I017 E2
I018 E2
I019 E1
I020 E3
I021 E1
I022 F2
I023 F3
I024 F3
I025 F2
I026 F1
I027 C2
I028 G3
I029 G3
I030 E5
I031 E4
I032 E5
I033 F4
I034 F5
I035 F5
I036 F5
I037 C8
I038 C8
I039 D6
I041 B8
I042 B7
I043 B7
I044 B8
I045 C6
I046 C7
I047 D7
I048 D7
I049 D8
I050 D8
I051 E7
I052 D7
I053 E7
I054 E7
I055 E8
I056 A2
I057 D7
I059 E8
I060 A10
I061 A10
I062 B10
I063 B10
I064 B8
I065 C9
I066 C8
I067 C8
I070 B11
I071 F10
I072 D11
I073 F10
I074 F11
I075 C13
I077 F11
I078 C13
I079 C13
I080 G10
I081 F7
I082 F7
I083 F8
I084 F8
I085 E12
I088 E13
I089 E12
I090 E13
I091 E14
I092 F13
I093 F12
I094 F12
I095 H6
I096 H7
I098 H8
I282 D1
I283 F14
I284 E15
I285 A4
I286 A4
I287 A4
I288 B5
I289 A5
I290 G11
I291 H11
I292 H10
I293 H11
I294 D13
I295 D6
I296 F6
I297 E7
I298 C7
I299 B11


A6
LLC SUPPLY
BIAS SUPPLY
25V_HOT
18V(22V5)
BC857BW 7090
19V3 (24V)
18V6 (0V)
7092 BC807-25W
7091 BC857BW
BCP56 7013
18V6 (22V1)
7093 LM317T
IN OUT ADJ
16V2(4V7)
15V9
BAS316 6095
SW25V_HOT
400V_HOT
F001
7003 TCET1102(G)
+5V_INT_SW
LATCH
5V1(4V2)
7002 TCET1102(G)
VTUN
BZX384-C6V8
BZX384-C5V6
Vs_unsw
70-90V
VS
7042 PMST5401
BZX384-C47
CONTROL
7001 MC34067P
VCC EN|UA VREF OSCC OSCR OSCCC OS EAO Ip In SOST GND OA OB PGND FI
VS-CONTROLLER
HIGH SIDE DRIVE
LOW SIDE DRIVE
5001 S13932-04
7005 STP15NK50ZFP
7006 STP15NK50ZFP
BZG03-C270
7020 BC517
7021 BC517
7007 BC327-25
7008 BC327-25
7012 BC847BW
5002
5004
BS42315-02
6044 STTH2003C
SOFTSTART CONTROL
CURRENT PROTECTION
7017 BC857BW
7018 BC847BW
7009 BC847BW
3050 3R9 NFR25
VRS FEEDBACK
7010 TS2431
7011 TS2431
34V(4V)
2V5(0V6)
1V9(0V7)
VRS
T2,5A/250V 19382
BY328/20
F1A/250V 19370
+30V
VB
35V(4V)
5290 BD15403
STPS745F
VSND_POS
GND_SND
VSND_NEG
DC_PROT
1002
TO 1MO2
C
PDP AUDIO
EMC HOLE 1000
EMC HOLE 1001
EMC HOLE 1009
EMC HOLE 1006
EMC HOLE 1008
HEATSINK 0204
MEASURED DC-VOLTAGES
NORMAL . .
STANDBY (. . .)
HOT GROUND
HOT
COLD
COLD GROUND
3104 313 6066.3
F_15460_006.eps
140405
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H

PDP Supply Panel: AUX Supply


A7
AUX SUPPLY
+12V-SUPPLY
VCC-SUPPLY
SEQUENCE DISCHARGE
FROM PROTECTION
+30V
+12V_OVP
+5V_INT_SW
VB
70-90V
Vs_unsw
VS
VA
VCC
+12V
+9V_STBY
VTUN
+5V_STBY_SW
+8V6
+9V_STBY_SW
TO 1M46
B
FTP2.X
TO 1M10
AL
AMBI LIGHT
TO CN23 PDP (DISPLAY)
TO CN42 PDP (DISPLAY)
TO CN52 PDP (DISPLAY)
7260 L4973V3.3 REGULATOR
7112 TEA1507P SMPS CONTROL
7212 TEA1507P SMPS CONTROL
7120 TCET1102(G)
7220 TCET1102(G)
7230 L4940P
5121 BD21232
5220 BS29238-00
MEASURED DC-VOLTAGES
NORMAL . . .
STANDBY (. . .)
3104 313 6066.3
F_15460_007.eps
050405
1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I

0323	E13
0342	G12
0352	G13
1110	B1
1200	G4
1260	A5
1M10	C13
1M46	B13
2021	I4
2050	G3
2051	H6
2054	C1
2055	E2
2056	C1
2057	E3
2058	G2
2059	I1
2061	I2
2111	D1
2112	D1
2113	E1
2114	E2
2117	D3
2118	C4
2121	E11
2122	D8
2123	D7
2126	E8
2133	E9
2138	D6
2203	I4
2205	I5
2210	I6
2211	I6
2212	G6
2213	I4
2214	I4
2215	I6
2217	H8
2218	G9
2219	I7
2222	G10
2223	F10
2225	H10
2226	G11
2227	G11
2228	H12
2229	H10
2230	I10
2231	I12
2232	I10
2233	H13
2234	I11
2235	I12
2236	H12
2237	H13
2260	A6
2261	A6
2262	A6
2263	B6
2264	B8
2265	A9
2266	B8
2267	B9
2268	B9
2269	A10
2270	B7
2273	D12
2274	D10
3051	G2
3053	H3
3055	B1
3058	G2
3062	H2
3063	D10
3079	D9
3083	H2
3084	I1
3085	I1
3086	I1
3087	I1
3088	I1
3101	D9
3106	C1
3107	C1
3108	C2
3109	C2
3110	C2
3111	C5
3112	D1
3113	D2
3114	D2
3115	D3
3116	D3
3117	D3
3118	C4
3120	D7
3121	D7
3122	D8
3123	D8
3124	D8
3125	E8
3126	E7
3128	E8
3130	D8
3131	D9
3132	E7
3133	C8
3134	D10
3135	E10
3136	E10
3138	D5
3139	D6
3140	E6
3141	E6
3142	E6
3143	E5
3145	C6
3146	C6
3147	D9
3148	E7
3149	G8
3150	D7
3151	B10
3152	B11
3153	B11
3154	C11
3155	C11
3156	B11
3157	D11
3158	D11
3200	G5
3202	H5
3203	I4
3204	I5
3205	I5
3206	F6
3207	F6
3208	F7
3209	F7
3210	H11
3212	G6
3213	I7
3214	H7
3215	I7
3216	H7
3217	H8
3218	I9
3219	I7
3220	I9
3224	G11
3225	H11
3226	G11
3228	F12
3229	F10
3260	A6
3261	A6
3262	A6
3263	A6
3264	A9
3265	B8
3268	B10
3269	A10
5121	C5
5220	G9
5225	G11
5229	H10
5260	A5
5268	A10
6050	G3
6054	E1
6055	E1
6061	I3
6062	H6
6086	I1
6111	D1
6112	E1
6113	D2
6114	B9
6117	C3
6120	D4
6123	D8
6133	B5
6142	G4
6201	B8
6202	I4
6204	F4
6205	I5
6206	F5
6211	I6
6213	H7
6216	H8
6225	G10
6230	I10
6260	A5
6267	B9
6268	A9
6269	H8
6270	I8
6271	B10
7050	G3
7052	I3
7058	I1
7059	I2
7060-1	B11
7060-2	B11
7061	C11
7110	C2
7112	C2
7117	C3
7120	B5
7121	D7
7130	E8
7134	D10
7140-1	D5
7140-2	D6
7142	D6
7200	G6
7202	H5
7212	G7
7217	G8
7220	F9
7227	H12
7230	I11
7260	A8
9000	A12
9001	A12
9002	C6
9009	A11
F102	D12
F106	E13
F107	G13
F110	A1
F111	D9
F113	G4
F114	I12
F115	A12
F116	I12
F118	E12
F119	E12
F120	F12
F121	E13
F122	B12
F123	E13
F124	B12
F125	E10
F126	E11
F127	E11
F128	E11
F129	E12
F130	D12
F131	D12
F132	E13
F133	E12
F134	F12
F135	F12
F136	G12
F137	G13
F138	H12
F139	H12
F140	G12
F260	A5
F264	A12
F265	A5
F380	B13
I101	B2
I102	B3
I103	A7
I104	A6
I105	B1
I106	C3
I107	C4
I108	D4
I109	C2
I110	D3
I111	C5
I112	D3
I113	D1
I114	E2
I115	D2
I116	D2
I117	D3
I118	D4
I120	D8
I121	D7
I122	D10
I123	D9
I124	D7
I125	D9
I126	D8
I127	D7
I128	D8
I129	E10
I130	A9
I131	E7
I132	E9
I133	B9
I134	B10
I135	C6
I136	B10
I137	B13
I138	A9
I139	A7
I140	B8
I141	A8
I142	A6
I147	C2
I148	H9
I152	C9
I153	D6
I154	D6
I155	D6
I156	D6
I157	E6
I158	C1
I159	E1
I160	E2
I161	G2
I162	C2
I163	C1
I164	C1
I165	E3
I166	F6
I167	F7
I168	F7
I169	H8
I170	H10
I171	H11
I172	A6
I173	A6
I174	D9
I175	A10
I176	B10
I177	B11
I178	B11
I179	B11
I180	B11
I181	C11
I200	G3
I201	H3
I202	I3
I203	I1
I204	I2
I207	I1
I208	H5
I209	H9
I210	G5
I211	F5
I212	F6
I213	G5
I214	G7
I215	G6
I216	G8
I217	H7
I218	H7
I219	H8
I220	H4
I221	H7
I222	I4
I223	I7
I224	I7
I225	I1
I230	F11
I231	F11
I233	F10
I234	G11
I235	G11
I236	G9
I237	H11
I238	G10
I240	H9
I243	I11
I244	I3
I245	I8
I246	B6
I247	B9
I248	C4
I249	C5

Layout PDP Supply Panel (Overview Top Side)

0201	B4
0203	D3
0204	D7
0306	G4
0307	G2
0308	G1
0309	G1
0311	G3
0323	F8
0342	F8
0352	E8
1002	A8
1003	F1
1004	F8
1082	C8
1083	B8
1084	A8
1110	D6
1200	E6
1260	F8
1400	F1
1402	F1
1450	F4
1460	E4
1M03	G5
1M05	G3
1M10	A8
1M46	G8
2000	A5
2001	E2
2002	G1
2003	E2
2004	E2
2005	A4
2006	A4
2007	A5
2008	A4
2009	A4
2010	A3
2011	B5
2012	A5
2013	C5
2014	B5
2015	A4
2016	A4
2017	C5
2018	A4
2019	E1
2020	B8
2021	D8
2022	B8
2023	E5
2024	E5
2025	E8
2026	A4
2027	A4
2028	C8
2029	C8
2030	E5
2031	E5
2032	A4
2033	A4
2034	B5
2035	A5
2036	A4
2037	B5
2038	D8
2039	B3
2040	B3
2041	B3
2042	B4
2043	E8
2044	C8
2045	C8
2046	B3
2047	A4
2048	A5
2049	A4
2050	E8
2051	F6
2052	B4
2053	A4
2054	D8
2055	D8
2056	D8
2057	D8
2058	C8
2059	D8
2060	A5
2061	D8
2062	A4
2070	B4
2071	B4
2090	B3
2111	D5
2112	D5
2113	D5
2114	D5
2117	D6
2118	C6
2121	C8
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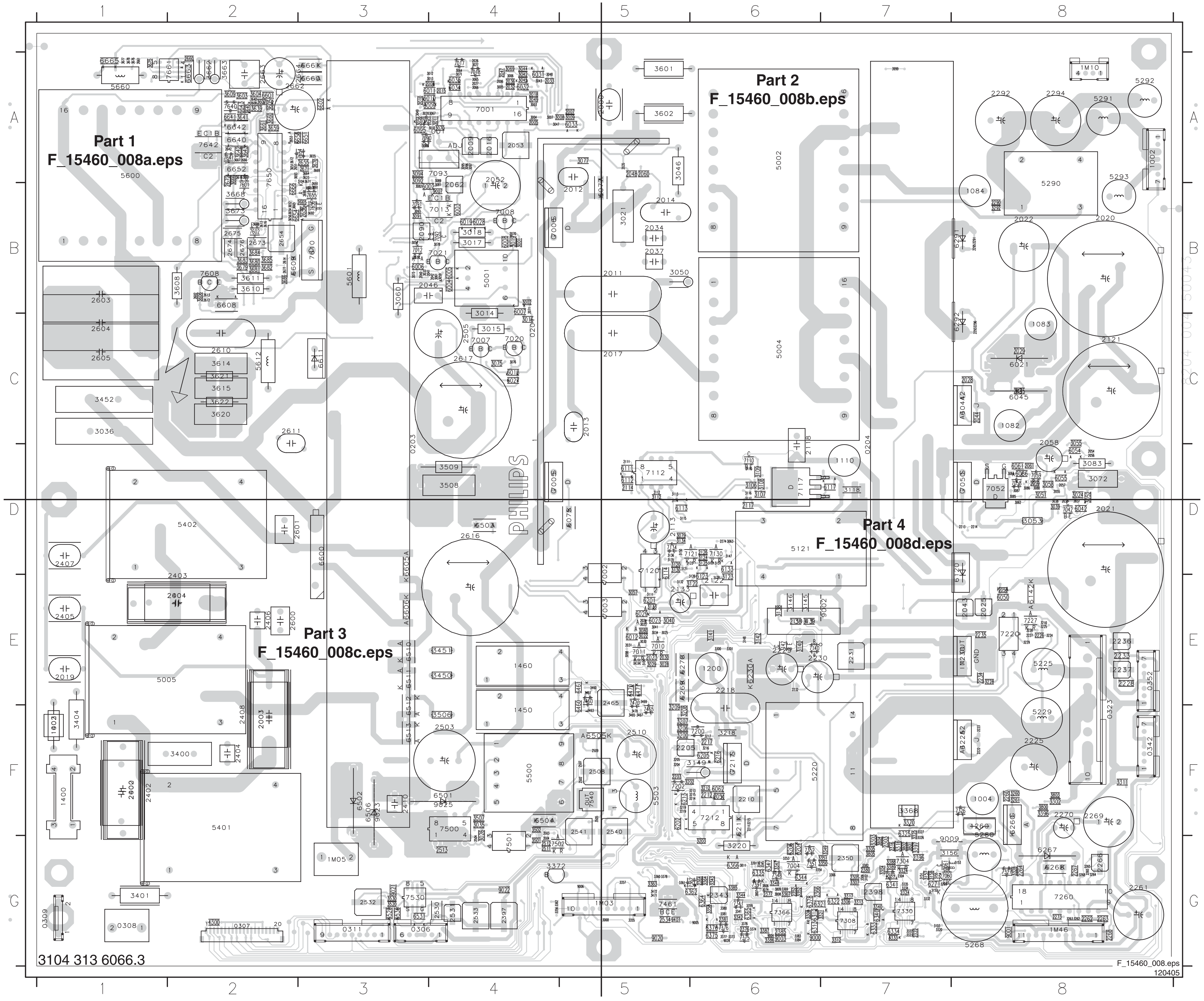

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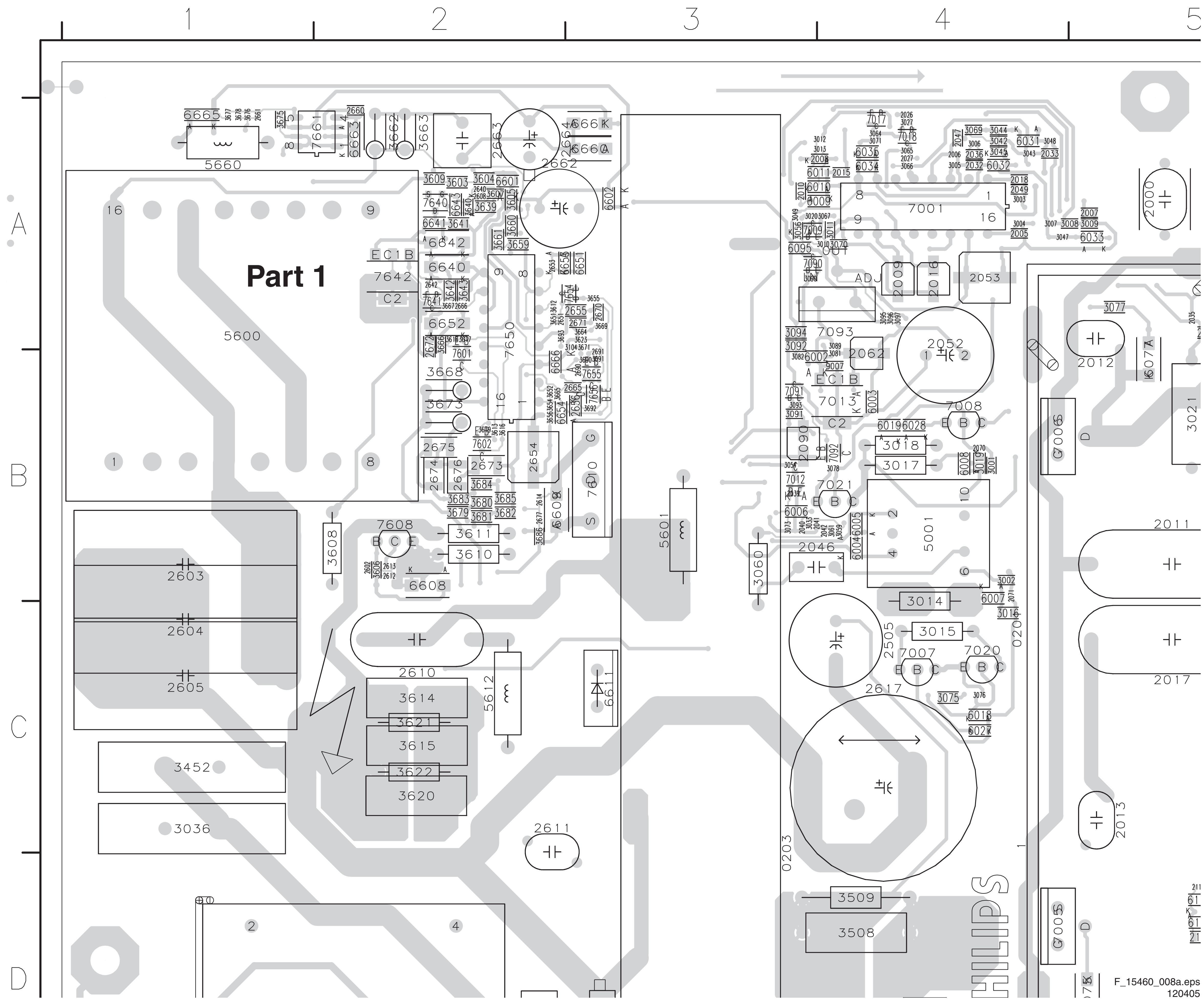
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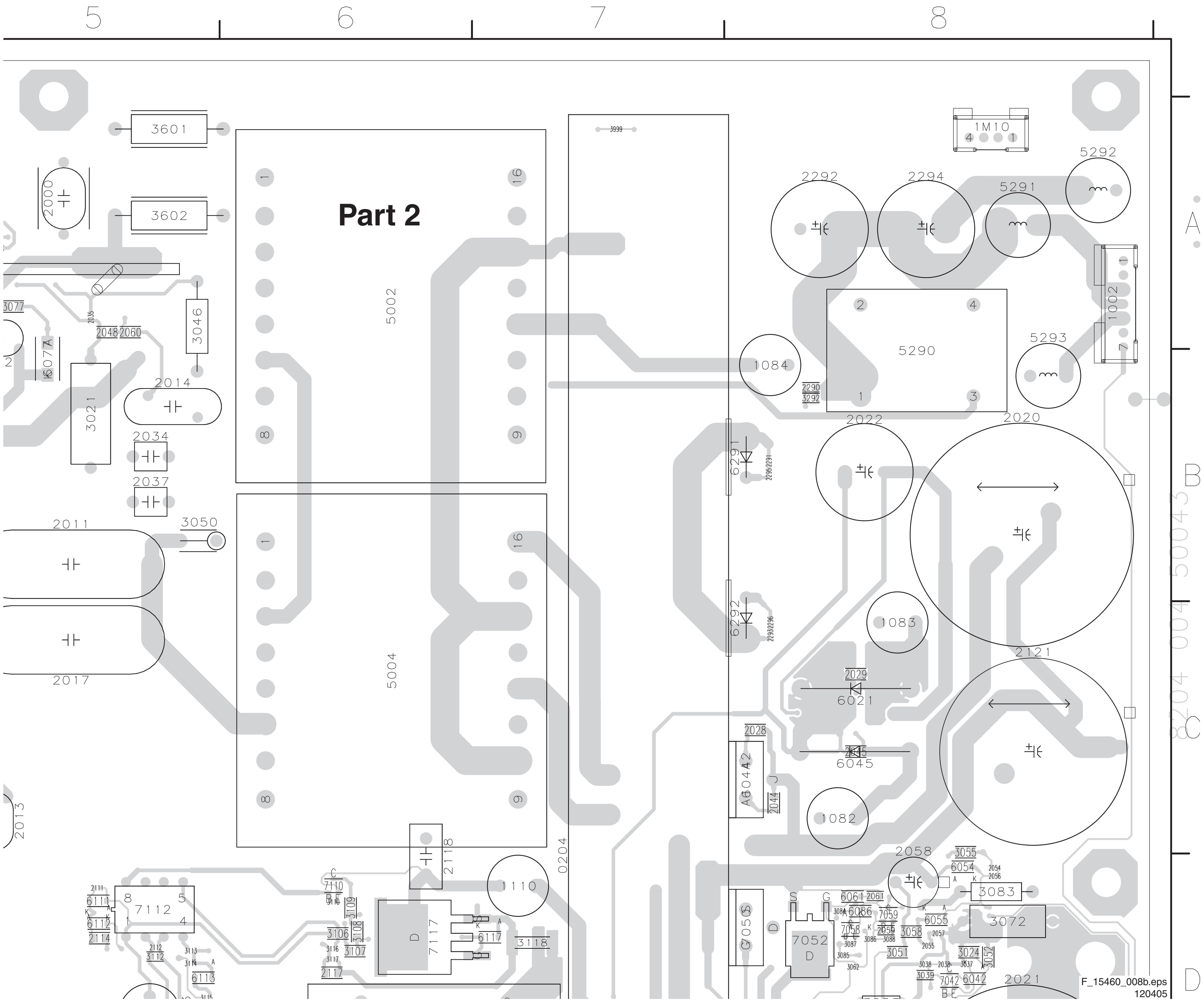
Layout PDP Supply Panel (Part 2 Top Side)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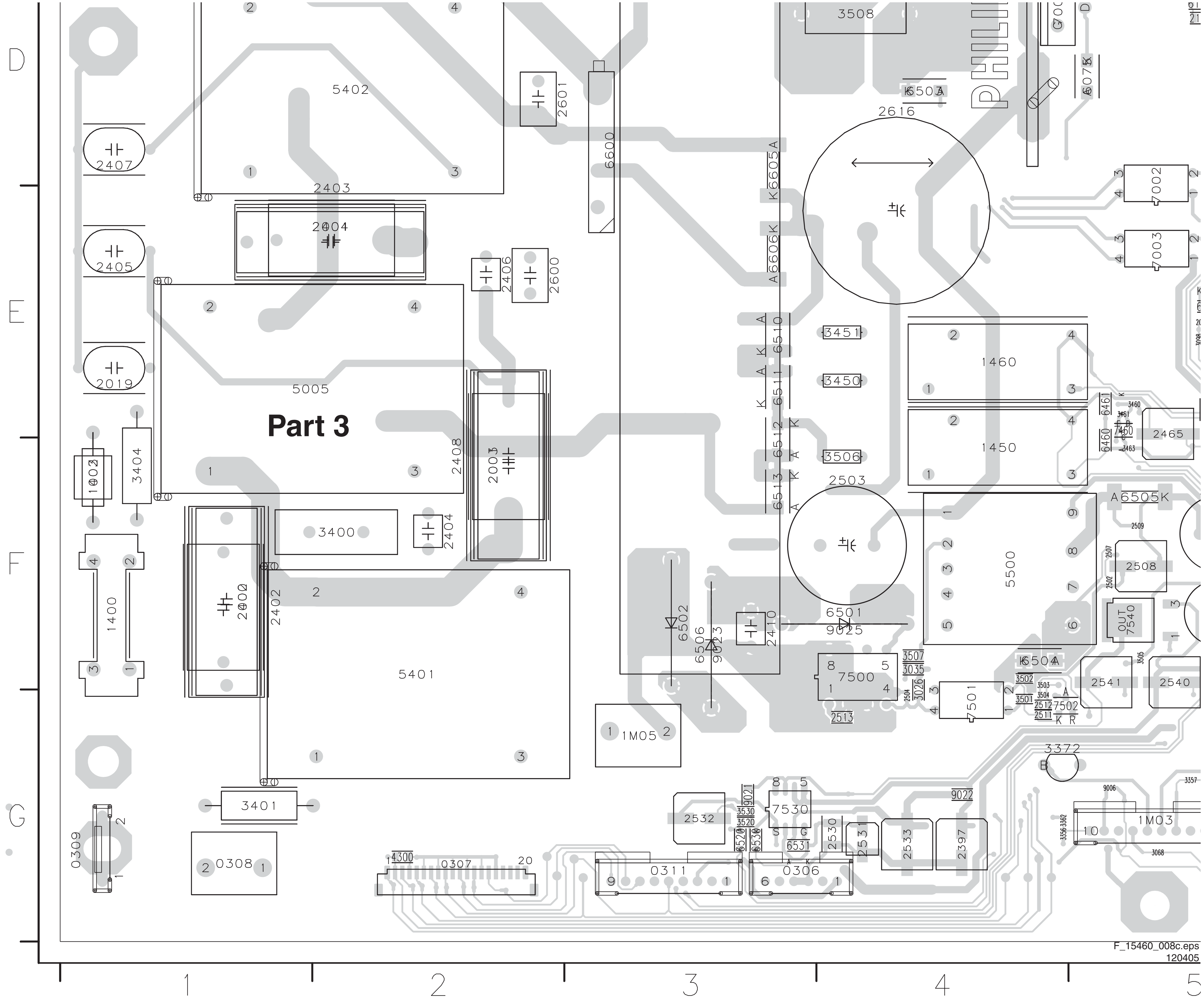
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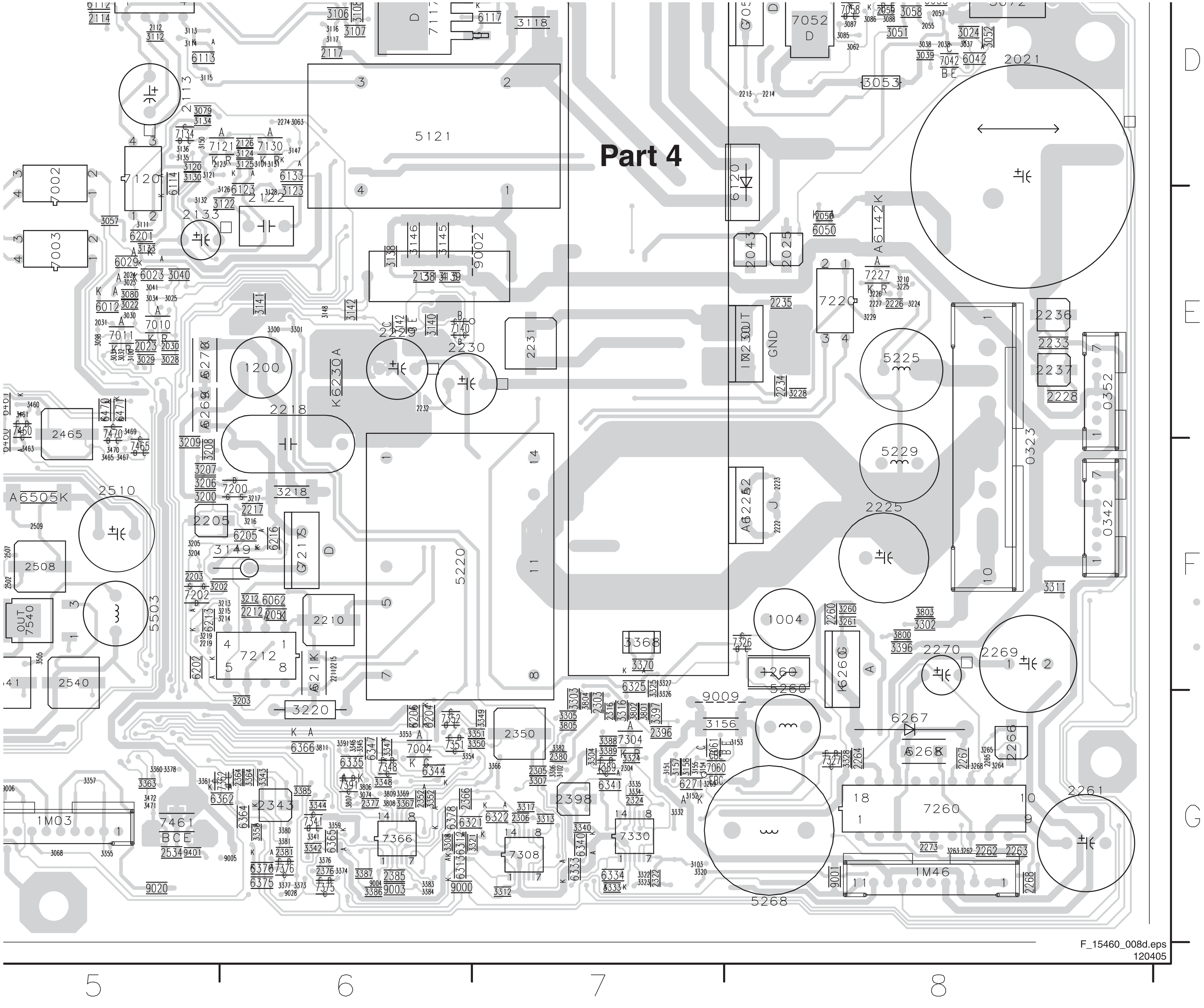
Layout PDP Supply Panel (Part 4 Top Side)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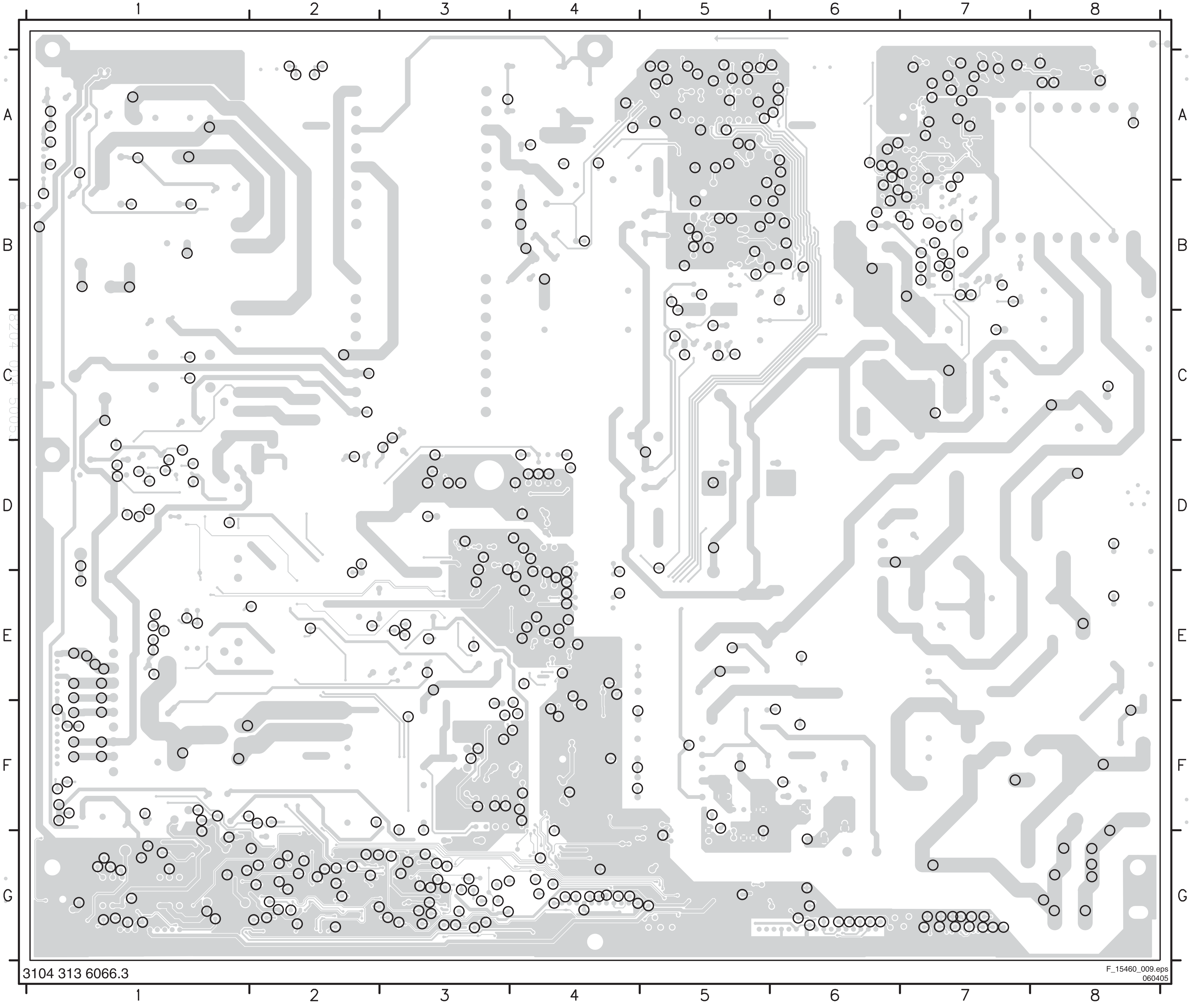
Layout PDP Supply Panel (Bottom Side)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Ambi Light

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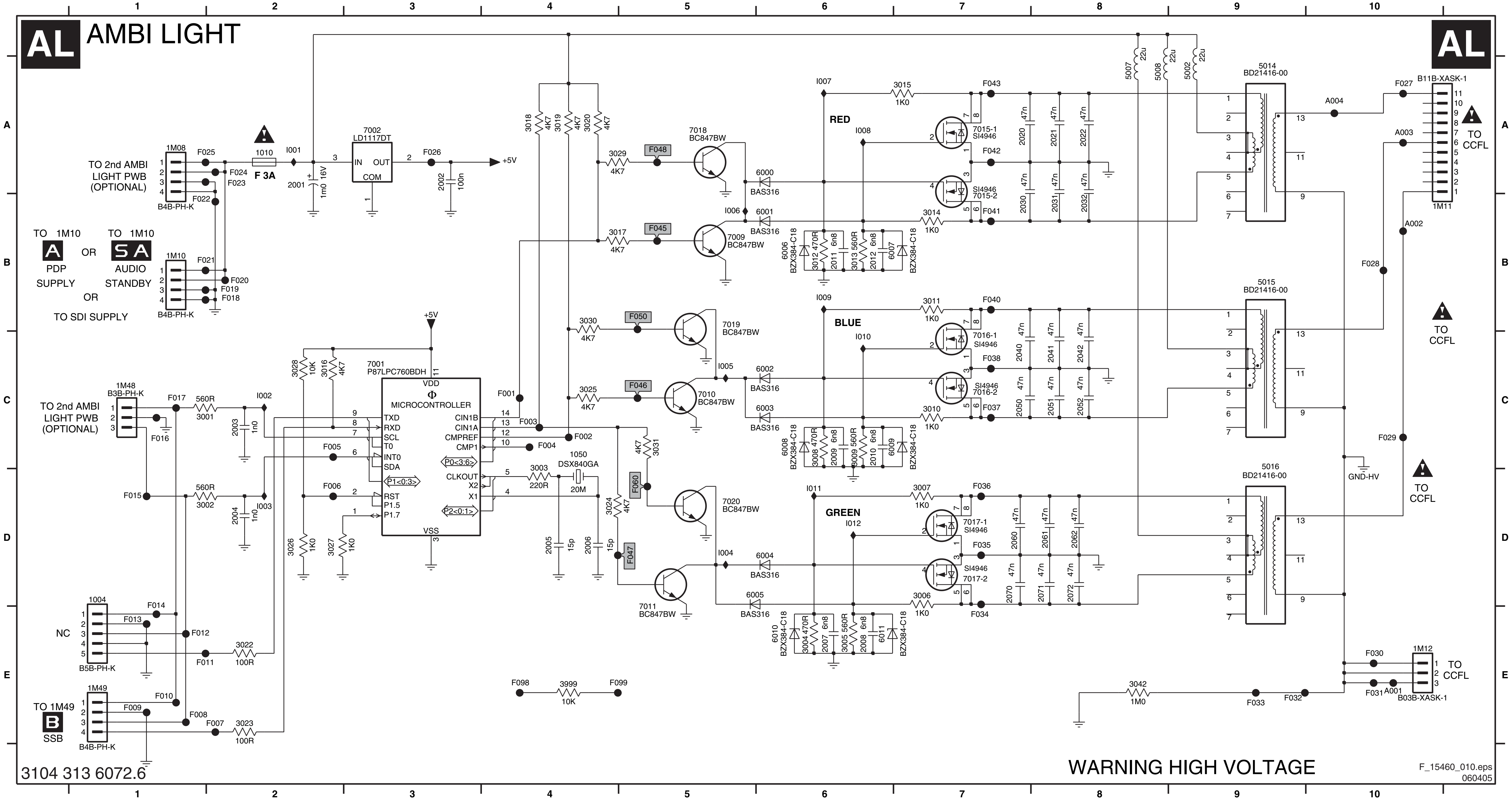
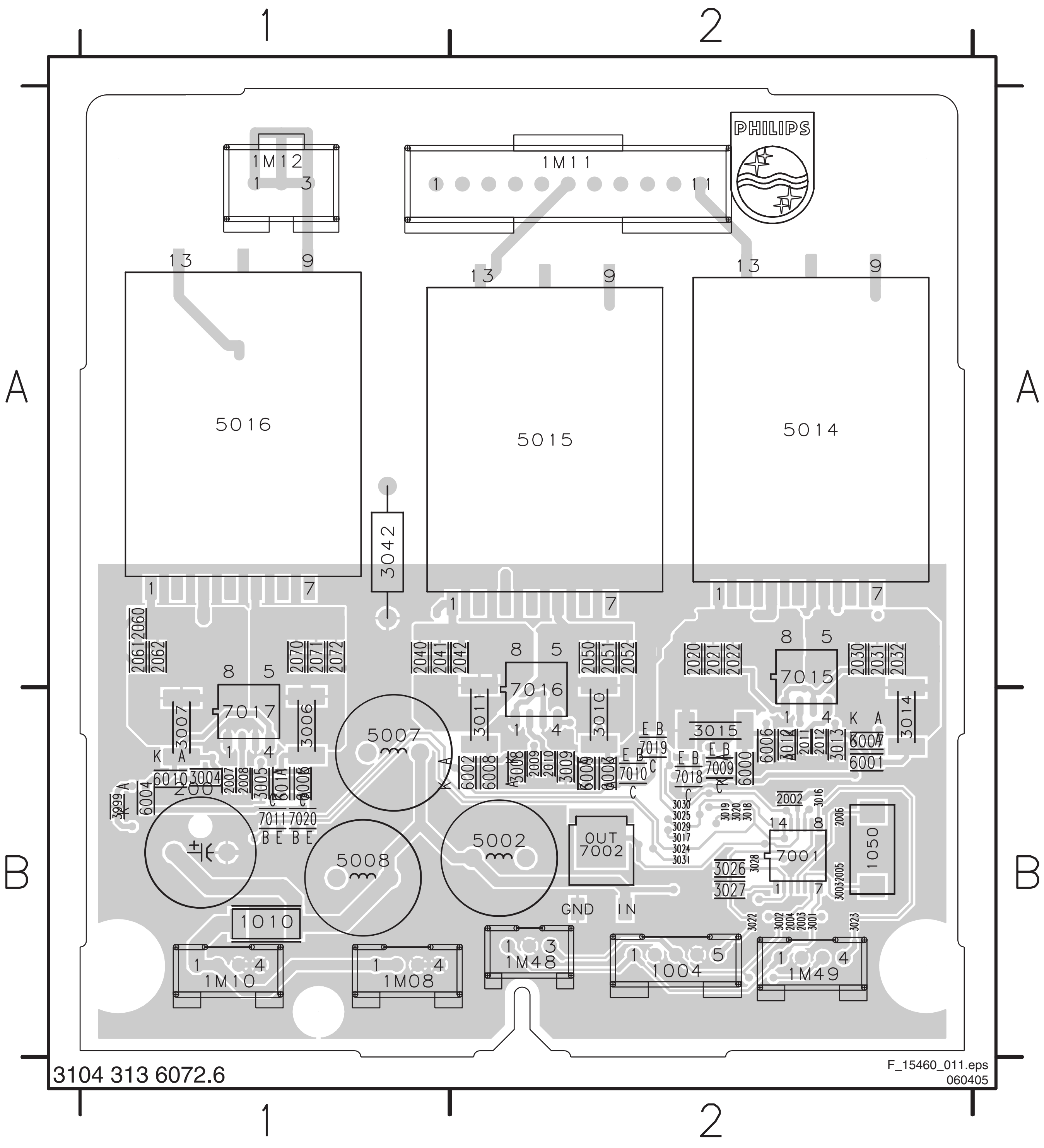
1M10 B1	2005 D4	2021 A8	2051 C8	3002 D1	3011 B7	3020 A4	3030 B4	5016 C9	6008 C6	7015-1 A7	A001 E10	F006 D2	F015 D1	F024 A2	F033 E9	F043 A7	I001 A2	I010 C6
1M11 B10	2006 D4	2022 A8	2052 C8	3003 D4	3012 B6	3022 E2	3031 C5	6000 A6	6009 C6	7015-2 A7	A002 B10	F007 E2	F016 C1	F025 A1	F034 E7	F045 B5	I002 C2	I011 D6
1M12 E10	2007 E6	2030 B7	2060 D7	3004 E6	3013 B6	3023 E2	3042 E8	6001 B6	6010 E6	7016-1 C7	A003 A10	F008 E1	F017 C1	F026 A3	F035 D7	F046 C5	I003 D2	I012 D6
1M48 C1	2008 E6	2031 B8	2061 D8	3005 E6	3014 B7	3024 D4	3999 E4	6002 C6	6011 E6	7016-2 C7	A004 A10	F009 E1	F018 B2	F027 A10	F036 D7	F047 D5	I004 D5	
1M49 E1	2009 C6	2032 B8	2062 D8	3006 D7	3015 A7	3025 C4	5002 A9	6003 C6	7001 C3	7017-1 D7	F001 C4	F010 E1	F019 B2	F028 B10	F037 C7	F048 A5	I005 C5	



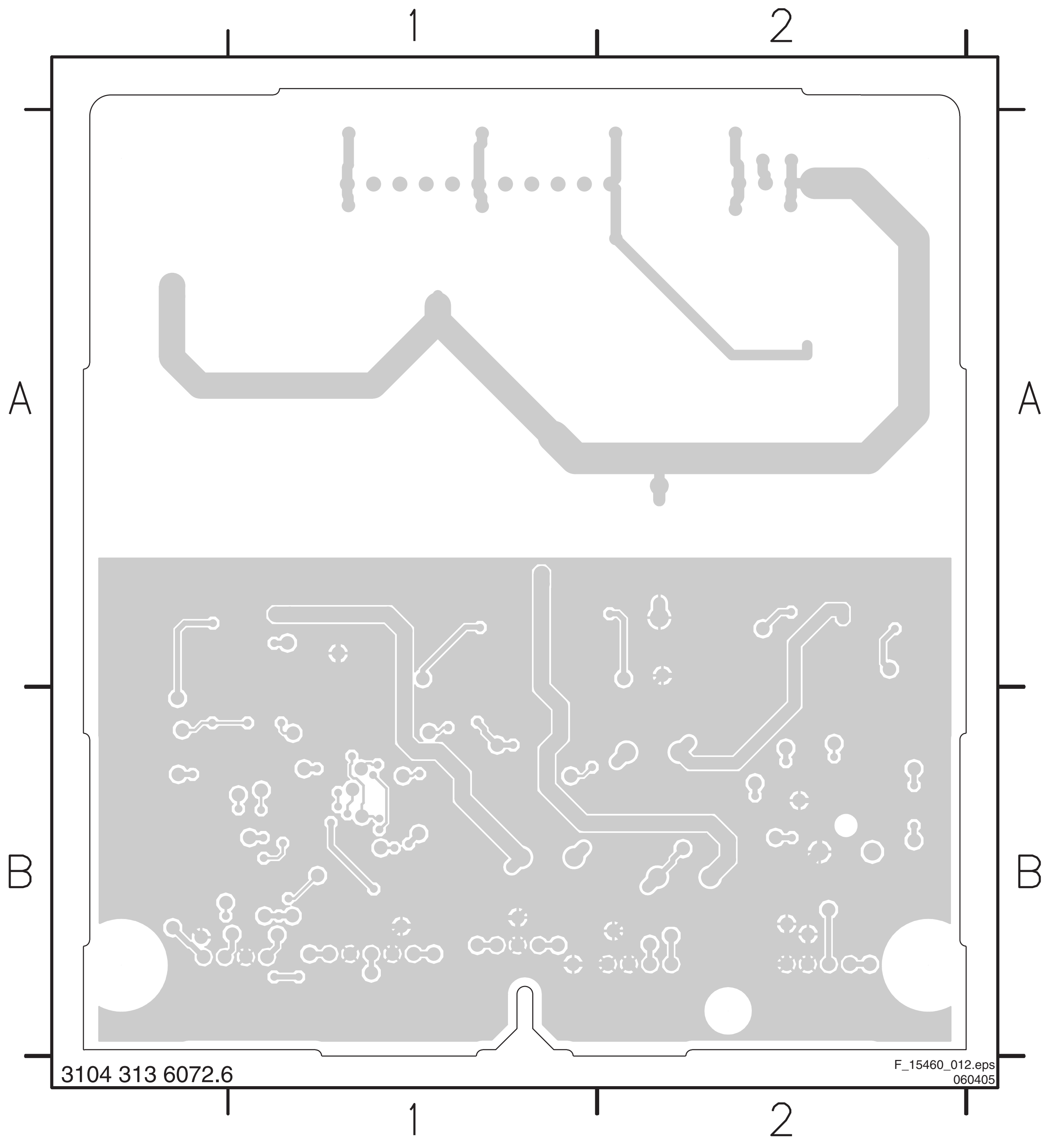
AL
AMBI LIGHT
AL
1 2 3 4 5 6 7 8 9 10
A B C D E
TO 2nd AMBI LIGHT PWB (OPTIONAL)
1M08
B4B-PH-K
F025
F024
F023
F022
1010
F 3A
I001
2001
1m0 16V
7002
LD1117DT
IN
OUT
COM
F026
2002
100n
+5V
TO 1M10
A
PDP SUPPLY
OR
TO 1M10
SA
AUDIO STANDBY
OR
TO SDI SUPPLY
1M10
F021
F020
F019
F018
3018 4K7
3019 4K7
3020 4K7
3029 4K7
F048
7018 BC847BW
3017 4K7
F045
7009 BC847BW
6000 BAS316
6001 BAS316
I006
I007
RED
I008
3015 1K0
F043
7015-1 SI4946
SI4946 7015-2
F042
F041
3014 1K0
6006 BZX384-C18
3012 470R
2011 6n8
3013 560R
2012 6n8
6007 BZX384-C18
2020 47n
2021 47n
2022 47n
2030 47n
2031 47n
2032 47n
5007 22u
5008 22u
5002 22u
5014 BD21416-00
F027
B11B-XASK-1
A004
A003
TO CCFL
1M11
A002
F028
I009
BLUE
I010
3011 1K0
F040
7016-1 SI4946
SI4946 7016-2
F038
F037
3010 1K0
6002 BAS316
6003 BAS316
I005
6008 BZX384-C18
3008 470R
2009 6n8
3009 560R
2010 6n8
6009 BZX384-C18
2040 47n
2041 47n
2042 47n
2050 47n
2051 47n
2052 47n
5015 BD21416-00
TO CCFL
F029
GND-HV
3030 4K7
F050
7019 BC847BW
3025 4K7
F046
7010 BC847BW
3031 4K7
F060
3024 4K7
F047
7020 BC847BW
7011 BC847BW
I004
6004 BAS316
6005 BAS316
I011
GREEN
I012
3007 1K0
F036
7017-1 SI4946
F035
SI4946 7017-2
3006 1K0
F034
6010 BZX384-C18
3004 470R
2007 6n8
3005 560R
2008 6n8
6011 BZX384-C18
2060 47n
2061 47n
2062 47n
2070 47n
2071 47n
2072 47n
5016 BD21416-00
TO CCFL
1M48
B3B-PH-K
TO 2nd AMBI LIGHT PWB (OPTIONAL)
F017
560R 3001
F016
I002
2003 1n0
F015
560R 3002
2004 1n0
I003
3028 10K
3016 4K7
+5V
7001
P87LPC760BDH
VDD
Φ
MICROCONTROLLER
TXD
RXD
SCL
T0
INT0
SDA
P1<0:3>
RST
P1.5
P1.7
VSS
CIN1B
CIN1A
CMPREF
CMP1
P0<3:6>
CLKOUT
X2
X1
P2<0:1>
F005
F006
3026 1K0
3027 1K0
F001
F003
F002
F004
1050
DSX840GA
3003 220R
20M
2005 15p
2006 15p
1004
NC
F014
F013
F012
F011
3022 100R
B5B-PH-K
TO 1M49
B
SSB
1M49
F010
F009
F008
F007
3023 100R
B4B-PH-K
F098
3999 10K
F099
3042 1M0
F033
F032
F030
F031
A001
1M12
B03B-XASK-1
TO CCFL
3104 313 6072.6
WARNING HIGH VOLTAGE
F_15460_010.eps
060405

Layout Ambi Light (Top Side)

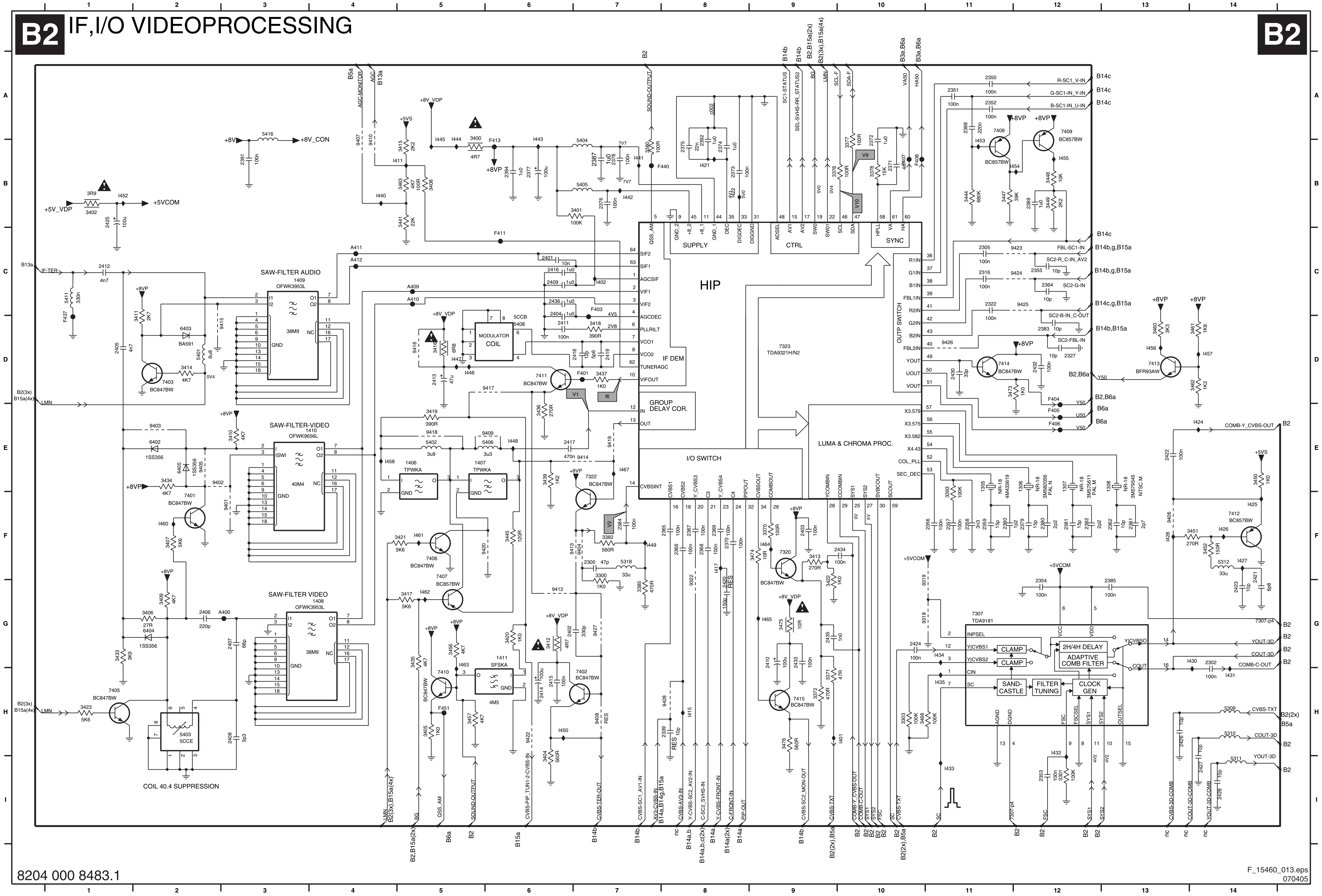
1004	B2	2001	B1	2010	B2	2040	A1	2070	A1	3007	B1	3016	B2	3026	B2	5007	B1	6004	B1	7002	B2	7020	B1
1010	B1	2002	B2	2011	B2	2041	A1	2071	A1	3008	B2	3017	B2	3027	B2	5008	B1	6005	B1	7009	B2		
1050	B2	2003	B2	2012	B2	2042	A2	2072	A1	3009	B2	3018	B2	3028	B2	5014	A2	6006	B2	7010	B2		
1M08	B1	2004	B2	2020	A2	2050	A2	3001	B2	3010	B2	3019	B2	3029	B2	5015	A1	6007	B2	7011	B1		
1M10	B1	2005	B2	2021	A2	2051	A2	3002	B2	3011	B2	3020	B2	3030	B2	5016	A1	6008	B2	7015	B2		
1M11	A2	2006	B2	2022	A2	2052	A2	3003	B2	3012	B2	3022	B2	3031	B2	6000	B2	6009	B2	7016	B2		
1M12	A1	2007	B1	2030	A2	2060	A1	3004	B1	3013	B2	3023	B2	3042	A1	6001	B2	6010	B1	7017	B1		
1M48	B2	2008	B1	2031	A2	2061	A1	3005	B1	3014	B2	3024	B2	3999	B1	6002	B2	6011	B1	7018	B2		
1M49	B2	2009	B2	2032	A2	2062	A1	3006	B1	3015	B2	3025	B2	5002	B2	6003	B2	7001	B2	7019	B2		


1
2
A
B
1M12
1M11
5016
5015
5014
3042
5007
5008
5002
7017
7016
7015
7002
7001
1050
1010
1M10
1M08
1M48
1004
1M49
GND
IN
OUT
3104 313 6072.6
F_15460_011.eps
060405

Layout Ambi Light (Bottom Side)


1
2
A
B
3104 313 6072.6
F_15460_012.eps
060405

SSB: IF, I/O Video Processing


B2
IF,I/O VIDEOPROCESSING
HIP
7323
TDA9321H/N2
SUPPLY
CTRL
SYNC
IF DEM
GROUP DELAY COR.
I/O SWITCH
LUMA & CHROMA PROC.
OUTP SWITCH
SAW-FILTER AUDIO
1409
OFWK3953L
SAW-FILTER-VIDEO
1410
OFWK9656L
SAW-FILTER VIDEO
1408
OFWK3953L
MODULATOR COIL
5CCB
5408
1406
TPWKA
1407
TPWKA
1411
SFSKA
4M5
5403
5CCE
COIL 40.4 SUPPRESSION
7307
TDA9181
CLAMP
2H/4H DELAY
ADAPTIVE COMB FILTER
SAND-CASTLE
FILTER TUNING
CLOCK GEN
+8V
+8V_CON
+5V_VDP
+5VCOM
+8V_VDP
+8VP
+5VS
IF-TER
LMN
SOUND-OUTPUT
QSS_AM
R-SC1_V-IN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
FBL-SC1-IN
SC2-R_C-IN_AV2
SC2-G-IN
SC2-B-IN_C-OUT
SC2-FBL-IN
COMB-Y_CVBS-OUT
YOUT-3D
COUT-3D
COMB-C-OUT
CVBS-TXT
8204 000 8483.1
F_15460_013.eps
070405

1305	E11
1306	E12
1307	E12
1308	E13
1406	E5
1407	E5
1408	G4
1409	C3
1410	E4
1411	G6
2300	F7
2302	G14
2305	C11
2316	C11
2322	C11
2327	D12
2339	H8
2350	A11
2351	A11
2352	A11
2353	I12
2354	G12
2355	C12
2356	F11
2357	F11
2358	F11
2359	F11
2360	F11
2361	F13
2362	F13
2364	C12
2365	F8
2366	F8
2367	F8
2368	F8
2369	F8
2370	F8
2371	B10
2372	B10
2373	B8
2374	B8
2375	B8
2376	B7
2377	B6
2378	B7
2379	F12
2380	F12
2381	F12
2382	F12
2383	D12
2384	F7
2385	G13
2387	B7
2388	A11
2389	B12
2391	B3
2392	B8
2394	B6
2401	C6
2402	G6
2403	F9
2404	C7
2405	D1
2406	G2
2407	G3
2408	H3
2409	C7
2410	G9
2411	D6
2412	C1
2413	D5
2414	H6
2415	H6
2416	C7
2417	E6
2418	D6
2419	D7
2420	G8
2421	F14
2422	E13
2423	G14
2424	G10
2425	B1
2426	H13
2427	I14
2428	I14
2430	D11
2432	D12
2433	G9
2434	F10
2435	G9
2436	C7
3300	F7
3301	I12
3303	H10
3370	F9
3371	H9
3372	H9
3376	B9
3377	B10
3378	B10
3380	B7
3382	F7
3385	G7
3393	F11
3400	B5
3401	B7
3402	B1
3404	I6
3405	H5
3406	G2
3407	F2
3408	B5
3409	G2
3410	E3
3411	D2
3412	G6
3413	F9
3414	D2
3415	B5
3416	D5
3417	G5
3418	D7
3419	E5
3420	G6
3421	F5
3422	G9
3423	H1
3433	G1
3434	E2
3435	G5
3436	E6
3437	D7
3439	E6
3441	B5
3444	B11
3445	F6
3447	B11
3448	B12
3449	B12
3450	E14
3451	F14
3452	F14
3456	G5
3457	H5
3460	D13
3461	D14
3462	D14
3463	B5
3468	H10
3473	D11
3474	F9
3475	G9
3476	H9
5309	H14
5310	H14
5311	I14
5312	F14
5318	F7
5401	D2
5402	E5
5403	H2
5404	B7
5405	B7
5406	E6
5408	D6
5411	C1
5416	A3
6402	E2
6403	D2
6404	G2
6405	E2
7307	G11
7320	F9
7322	E7
7323	D9
7401	F2
7402	H7
7403	D2
7405	H1
7406	F5
7407	F5
7408	A11
7409	A12
7410	H5
7411	D6
7412	F14
7413	D13
7414	D11
7415	H9
9318	G11
9319	G11
9322	G8
9401	F3
9402	E2
9403	E2
9404	F7
9405	E2
9406	F13
9407	B4
9408	H7
9409	E6
9410	B4
9412	G6
9413	F7
9414	E7
9415	D2
9416	D5
9417	D6
9418	E5
9419	E7
9420	F6
9422	H6
9423	C11
9424	C11
9425	C12
9426	D11
9427	G7
9428	H8
A400	G3
A409	C5
A410	C5
A411	C4
A412	C4
F401	D7
F403	C7
F404	D12
F405	E12
F406	E12
F407	B10
F408	B10
F411	C6
F413	B6
F437	D1
F440	B8
I401	H10
I402	C7
I411	B5
I415	H8
I417	F8
I421	B8
I422	B8
I424	E14
I425	F14
I426	F14
I427	F14
I428	F13
I430	G14
I431	H14
I432	H12
I433	I11
I434	G11
I435	H11
I440	B4
I441	B7
I442	B7
I443	B6
I444	B5
I445	B5
I446	D5
I447	D5
I448	E6
I449	F7
I450	H6
I451	H5
I452	B1
I453	B11
I454	B12
I455	B12
I456	D13
I457	D14
I458	E4
I460	F2
I461	F5
I462	G5
I463	G5
I464	F9
I465	G9
I467	E7
c002	A8

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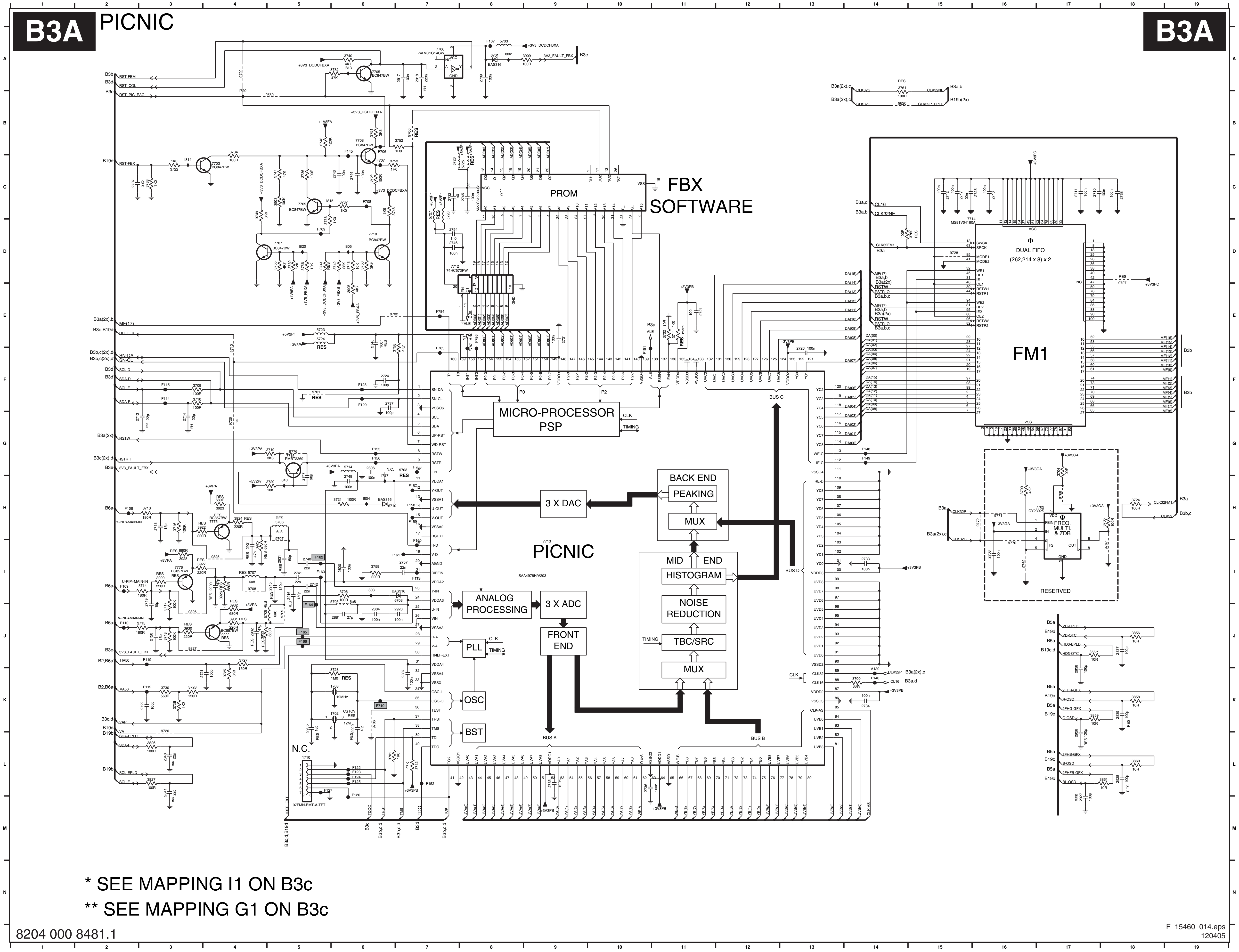
B3A
PICNIC
B3A
PROM
FBX
SOFTWARE
FM1
DUAL FIFO
(262,214 x 8) x 2
MS81V04160A
MICRO-PROCESSOR
PSP
3 X DAC
BACK END
PEAKING
MUX
PICNIC
SAA4978H/V203
MID
END
HISTOGRAM
NOISE
REDUCTION
TBC/SRC
MUX
ANALOG
PROCESSING
3 X ADC
FRONT
END
PLL
OSC
BST
N.C.
BUS A
BUS B
BUS C
BUS D
CLK
TIMING
FREQ.
MULTI.
& ZDB
CY23025
RESERVED
M27C512-90
74HC573PW
74LVC1G14GW
07FMN-BMT-A-TFT
RST-FEM
RST_COL
RST_PIC_EAG
RST-FBX
MF(17)
HD_E_T0
SN-DA
SN-CL
SCL-D
SDA-D
SCL-F
SDA-F
RSTW
RSTR_I
3V3_FAULT_FBX
Y-PIP+MAIN-IN
U-PIP+MAIN-IN
V-PIP+MAIN-IN
HA50
VA50
SDA-EPLD
SCL-EPLD
VD-EPLD
VD-OTC
HD3-EPLD
HD3-OTC
2FHR-GFX
R-OSD
2FHG-GFX
G-OSD
2FHB-GFX
B-OSD
2FHFB-GFX
BL-OSD
CLK32P
CLK32G
CLK32NE
CLK32P_EPLD
CLK32FM1
CLK16
+3V3_DCDCFBXA
+1V8FA
+3V3PA
+8VPA
+5V2Pr
+3V3PB
+3V3PC
+3V3GA
B3a
B3b
B3c
B3d
B3e
B6a
B5a
B19b
B19c
B19d

PICNIC

* SEE MAPPING I1 ON B3c

** SEE MAPPING G1 ON B3c

8204 000 8481.1

F_15460_014.eps
120405

1702 K6
1703 K6
1710 L5
2707 C2
2708 I16
2709 A8
2710 C17
2711 C17
2712 C15
2713 G2
2714 G3
2716 C16
2717 C15
2718 H3
2719 I3
2720 J3
2721 K3
2722 K3
2724 F6
2725 C16
2726 F13
2727 E11
2731 E9
2732 C7
2733 I14
2734 K14
2735 L9
2736 L10
2737 F6
2738 C18
2740 I5
2741 I5
2742 I5
2743 C6
2744 C6
2745 C8
2746 D7
2747 H5
2748 E6
2749 H6
2754 D7
2757 I7
2800 I6
2804 J6
2806 G6
2807 K7
2837 J18
2838 K17
2839 K18
2840 L3
2841 L3
2881 J6
2900 I4
2901 I4
2902 J4
2915 I5
2916 I5
2917 A7
2918 A7
2920 J7
2926 L17
2927 M17
2928 L18
2929 K6
2931 I5
2935 K5
3700 K14
3701 L6
3702 E11
3703 H16
3704 G17
3705 H18
3706 I6
3709 F3
3710 F3
3711 E11
3712 L7
3713 H3
3714 I3
3715 J3
3716 H3
3717 J3
3718 J3
3719 G5
3720 H5
3721 H6
3722 C3
3723 K6
3724 H18
3725 K4
3726 K3
3727 J4
3728 K3
3730 K3
3732 A6
3733 C3
3734 B4
3736 C5
3737 C6
3738 D5
3739 D5
3740 A6
3741 D5
3742 D6
3743 D6
3746 C6
3747 C5
3748 B5
3749 C4
3750 D6
3751 B6
3752 B7
3753 C6
3754 C6
3755 D5
3756 D5
3758 F7
3759 I6
3760 D15
3761 A14
3826 L3
3827 L3
3856 J18
3857 J17
3858 K18
3859 K17
3860 L18
3861 L18
3903 C5
3905 E6
3909 A9
3922 H3
3923 H4
3924 H4
3925 I4
3926 I4
3927 I3
3928 I3
3929 I3
3930 J3
3931 J4
3932 J4
3933 J4
5703 A8
5705 I6
5706 H5
5707 I4
5708 J4
5714 G6
5723 E5
5724 E5
5725 C8
5726 C7
5727 C7
5728 C7
6701 A8
6703 I7
6710 H6
7702 H17
7703 C4
7705 A6
7706 A7
7707 D5
7708 B6
7709 C5
7710 D6
7711 C8
7712 D7
7713 I9
7714 D16
7715 G5
7775 H4
7776 I3
7777 J4
9700 B7
9701 F5
9702 E6
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9706 K6
9707 I5
9708 I4
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9710 F4
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9726 G4
9727 D18
9728 D15
9729 A4
9767 I18
9768 H17
9769 I16
9770 I16
9771 H16
9772 H16
9776 G5
9809 B5
9820 B14
9825 I4
9826 J3
9827 J3
A139 K14
F107 A8
F108 H2
F109 I2
F110 J2
F112 K3
F114 F3
F115 F3
F118 I7
F119 J3
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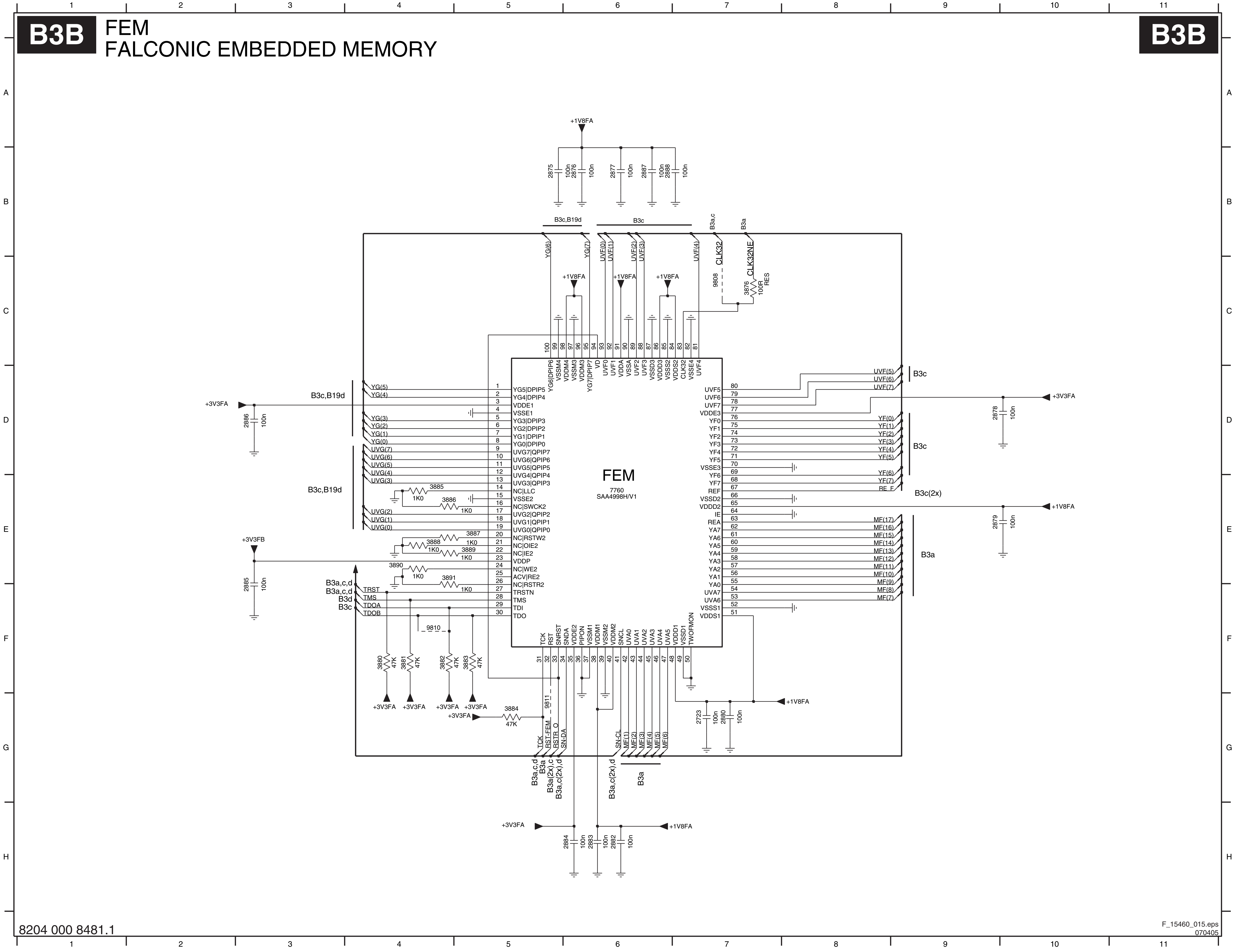
F123 L6
F124 L6
F125 L6
F126 M6
F127 L5
F128 F6
F129 F6
F140 K14
F145 B6
F148 G14
F149 G14
F151 F10
F152 L7
F155 G6
F156 G6
F157 H7
F158 H7
F159 H7
F160 I7
F161 I7
F162 I5
F163 I5
F164 J5
F165 J5
F166 J5
F706 B6
F707 C6
F708 C6
F709 D5
F710 K6
F784 E7
F785 F7
F786 E8
F787 F8
F788 G7
I720 A4
I727 G6
I802 A8
I803 I6
I804 H6
I805 D6
I810 H5
I813 A6
I814 C3
I815 C5
I820 D5

SSB: (FEM) Falconic Embedded Memory


B3B
FEM
FALCONIC EMBEDDED MEMORY
B3B
FEM
7760
SAA4998H/V1
+1V8FA
+3V3FA
+3V3FB
B3c,B19d
B3c
B3a,c
B3a
B3c(2x)
B3a,c,d
B3d
B3a(2x),c
B3a,c(2x),d
CLK32
CLK32NE
9808
3876 100R RES
9810
9811
3884 47K
3880 47K
3881 47K
3882 47K
3883 47K
3885 1K0
3886 1K0
3887 1K0
3888 1K0
3889 1K0
3890 1K0
3891 1K0
2875 100n
2876 100n
2877 100n
2887 100n
2888 100n
2886 100n
2885 100n
2878 100n
2879 100n
2723 100n
2880 100n
2884 100n
2883 100n
2882 100n
TRST
TMS
TDOA
TDOB
TCK
RST-FEM
RSTR_O
SN-DA
SN-CL
YG(0)–YG(7)
UVG(0)–UVG(7)
UVF(0)–UVF(7)
YF(0)–YF(7)
RE_F
MF(1)–MF(17)
YG5|DPIP5
YG4|DPIP4
VDDE1
VSSE1
YG3|DPIP3
YG2|DPIP2
YG1|DPIP1
YG0|DPIP0
UVG7|QPIP7
UVG6|QPIP6
UVG5|QPIP5
UVG4|QPIP4
UVG3|QPIP3
NC|LLC
VSSE2
NC|SWCK2
UVG2|QPIP2
UVG1|QPIP1
UVG0|QPIP0
NC|RSTW2
NC|OIE2
NC|IE2
VDDP
NC|WE2
ACV|RE2
NC|RSTR2
TRSTN
TMS
TDI
TDO
UVF5
UVF6
UVF7
VDDE3
YF0
YF1
YF2
YF3
YF4
YF5
VSSE3
YF6
YF7
REF
VSSD2
VDDD2
IE
REA
YA7
YA6
YA5
YA4
YA3
YA2
YA1
YA0
UVA7
UVA6
VSSS1
VDDS1
YG6|DPIP6
VSSM4
VDDM4
VSSM3
VDDM3
YG7|DPIP7
VD
UVF0
UVF1
VDDA
VSSA
UVF2
UVF3
VSSD3
VDDD3
VSSS2
VDDS2
CLK32
VSSE4
UVF4
TCK
RST
SNRST
SNDA
VDDE2
PIPON
VSSM1
VDDM1
VSSM2
VDDM2
SNCL
UVA0
UVA1
UVA2
UVA3
UVA4
UVA5
VDDD1
VSSD1
TWOFMON
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
8
9
10
11

2723	G7
2875	B5
2876	B6
2877	B6
2878	D9
2879	E9
2880	G7
2882	H6
2883	H6
2884	H6
2885	F3
2886	D3
2887	B6
2888	B6
3876	C7
3880	F4
3881	F4
3882	F4
3883	F5
3884	G5
3885	E4
3886	E4
3887	E5
3888	E4
3889	E5
3890	E4
3891	E4
7760	E6
9808	C7
9810	F4
9811	G5

8204 000 8481.1

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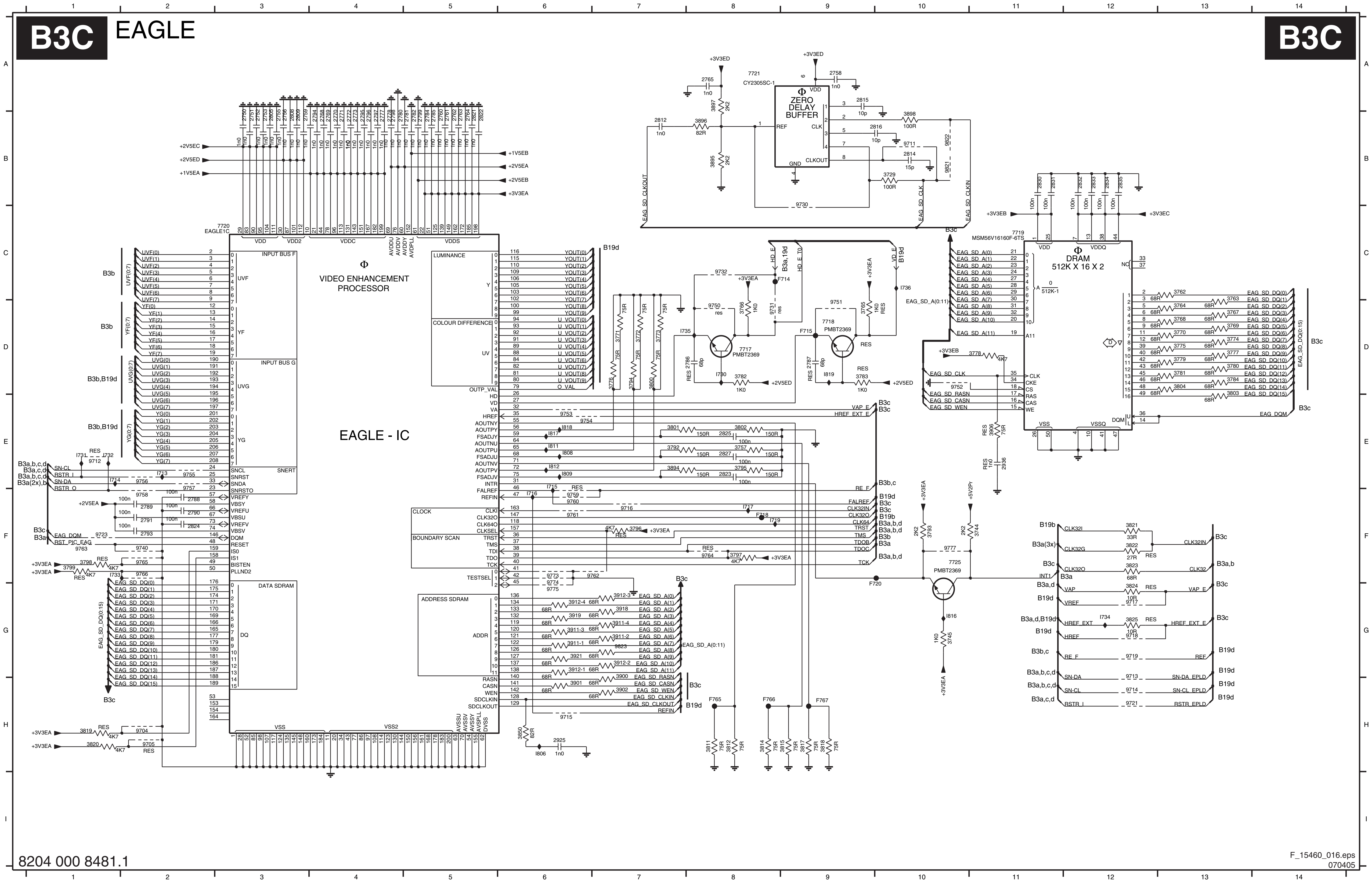
SSB: Eagle


B3C
EAGLE
B3C
7720
EAGLE1C
VIDEO ENHANCEMENT
PROCESSOR
EAGLE - IC
INPUT BUS F
INPUT BUS G
LUMINANCE
COLOUR DIFFERENCE
CLOCK
BOUNDARY SCAN
DATA SDRAM
ADDRESS SDRAM
7721
CY2305SC-1
ZERO
DELAY
BUFFER
7719
MSM56V16160F-6TS
DRAM
512K X 16 X 2
7717
PMBT2369
7718
PMBT2369
7725
PMBT2369
EAG_SD_A(0:11)
EAG_SD_DQ(0:15)
8204 000 8481.1
F_15460_016.eps
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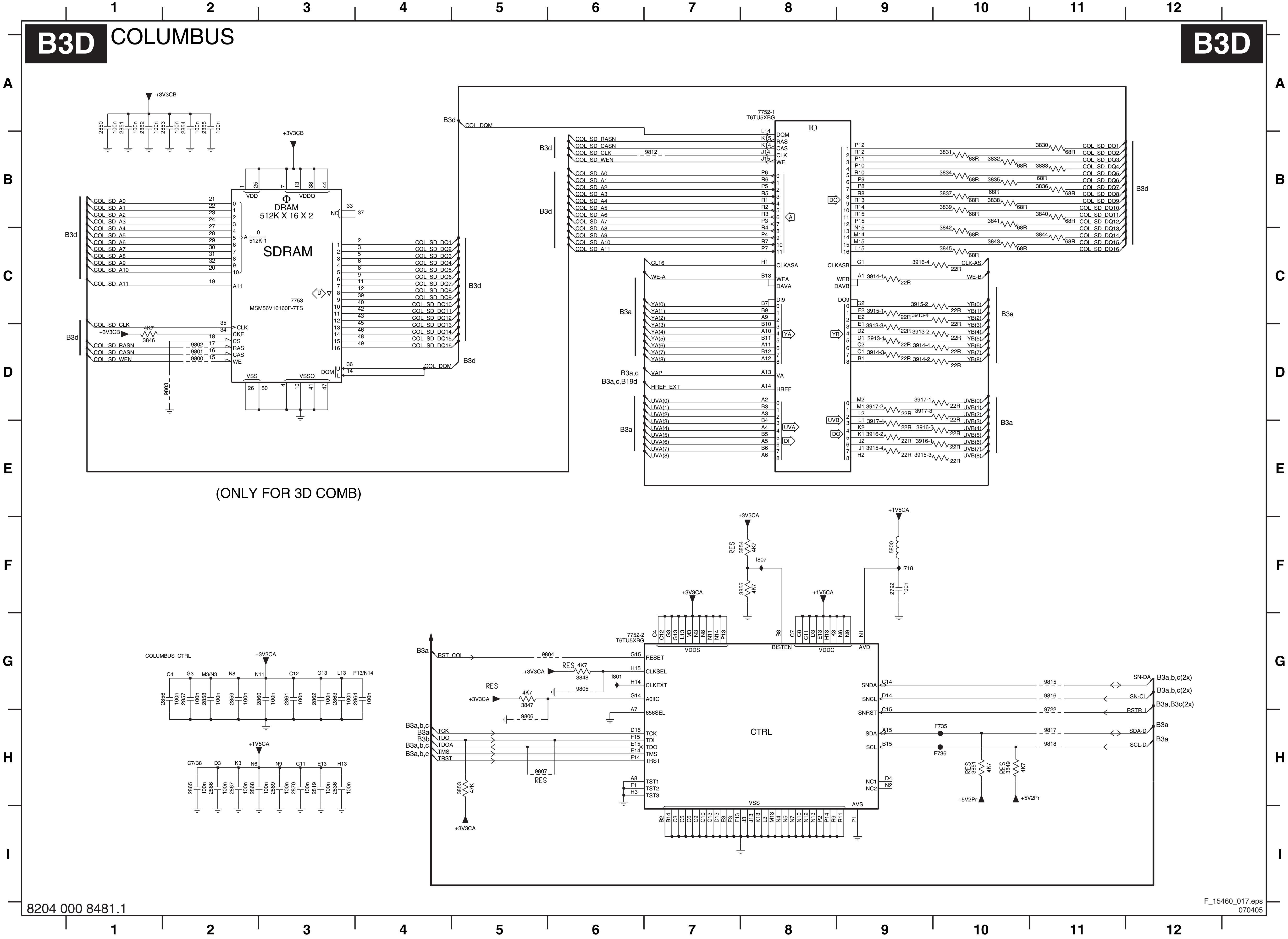
2750	B3
2751	B3
2752	B3
2753	B3
2755	B3
2756	B3
2758	A9
2759	B3
2760	B5
2761	B5
2762	B5
2763	B5
2764	B5
2765	A8
2768	B4
2769	B4
2770	B4
2771	B4
2772	B4
2773	B4
2777	B4
2778	B4
2780	B4
2781	B5
2782	B5
2784	B5
2785	B5
2786	D8
2787	D9
2788	F2
2789	F2
2790	F2
2791	F2
2793	F2
2794	B4
2795	B4
2796	B4
2797	B4
2798	B4
2799	B5
2805	B3
2808	B3
2809	B3
2812	B7
2814	B10
2815	A9
2816	B10
2821	B5
2822	B5
2823	E8
2824	F2
2825	E8
2827	E8
2830	B11
2831	B11
2832	B12
2833	B12
2834	B12
2835	B12
2925	H6
2936	E11
3729	B10
3744	F11
3745	G10
3757	E8
3762	C13
3763	D13
3764	D13
3765	D9
3766	D8
3767	D13
3768	D13
3769	D13
3770	D13
3771	D7
3772	D7
3773	D7
3774	D13
3775	D13
3776	D7
3777	D13
3778	D11
3779	D13
3780	D13
3781	D13
3782	D8
3783	D9
3784	D13
3792	E7
3793	F10
3794	D7
3795	E8
3796	F7
3797	F8
3798	F1
3799	F1
3800	D7
3801	E7
3802	E8
3803	E13
3804	D13
3811	H8
3812	H8
3814	H8
3815	H9
3817	H9
3818	H9
3819	H1
3820	H1
3821	F12
3822	F12
3823	F12
3824	G12
3825	G12
3850	H6
3894	E7
3895	B8
3896	B8
3897	A8
3898	B10
3900	H7
3901	H6
3902	H7
3906	E11
3911-1	G6
3911-2	G7
3911-3	G6
3911-4	G7
3912-1	G6
3912-2	G7
3912-3	G7
3912-4	G6
3918	G7
3919	G6
3921	G6
7717	D8
7718	D9
7719	C11
7720	C3
7721	A8
7725	F10
9704	H2
9705	H2
9711	B10
9712	E1
9713	H12
9714	H12
9715	H6
9716	F7
9717	G12
9718	G12
9719	G12
9721	H12
9723	F1
9730	C9
9731	D8
9732	C8
9740	F2
9750	D8
9751	D9
9752	D10
9753	E6
9754	E6
9755	E2
9756	E2
9757	F2
9758	F2
9759	F6
9760	F6
9761	F6
9762	F7
9763	F1
9764	F8
9765	F2
9766	F2
9773	F6
9774	G6
9775	G6
9777	F10
9821	B10
9822	B10
9823	G7
F714	C9
F715	D9
F718	F8
F720	G10
F765	H8
F766	H8
F767	H9
I713	E2
I714	E1
I715	E6
I716	F6
I717	F8
I719	F8
I730	D8
I731	E1
I732	E1
I733	F1
I734	G12
I735	D7
I736	C10
I806	H6
I808	E6
I809	E6
I811	E6
I812	E6
I816	G10
I817	E6
I818	E6
I819	D9

SSB: Columbus


B3D
COLUMBUS
B3D
1 2 3 4 5 6 7 8 9 10 11 12
A B C D E F G H I
+3V3CB
2850 100n 2851 100n 2852 100n 2853 100n 2854 100n 2855 100n
7753
MSM56V16160F-7TS
DRAM
512K X 16 X 2
SDRAM
512K-1
VDD
VDDQ
VSS
VSSQ
CLK
CKE
CS
RAS
CAS
WE
DQM
NC
COL_SD_A0
COL_SD_A1
COL_SD_A2
COL_SD_A3
COL_SD_A4
COL_SD_A5
COL_SD_A6
COL_SD_A7
COL_SD_A8
COL_SD_A9
COL_SD_A10
COL_SD_A11
COL_SD_CLK
COL_SD_RASN
COL_SD_CASN
COL_SD_WEN
COL_DQM
COL_SD_DQ1
COL_SD_DQ2
COL_SD_DQ3
COL_SD_DQ4
COL_SD_DQ5
COL_SD_DQ6
COL_SD_DQ7
COL_SD_DQ8
COL_SD_DQ9
COL_SD_DQ10
COL_SD_DQ11
COL_SD_DQ12
COL_SD_DQ13
COL_SD_DQ14
COL_SD_DQ15
COL_SD_DQ16
3846 4K7
9800 9801 9802 9803
B3d
7752-1
T6TU5XBG
IO
DQM
RAS
CAS
CLK
WE
CLKASA
CLKASB
WEA
DAVA
WEB
DAVB
VA
HREF
CL16
WE-A
WE-B
CLK-AS
YA(0) YA(1) YA(2) YA(3) YA(4) YA(5) YA(6) YA(7) YA(8)
YB(0) YB(1) YB(2) YB(3) YB(4) YB(5) YB(6) YB(7) YB(8)
UVA(0) UVA(1) UVA(2) UVA(3) UVA(4) UVA(5) UVA(6) UVA(7) UVA(8)
UVB(0) UVB(1) UVB(2) UVB(3) UVB(4) UVB(5) UVB(6) UVB(7) UVB(8)
VAP
HREF_EXT
9812
3830 3831 3832 3833 3834 3835 3836 3837 3838 3839 3840 3841 3842 3843 3844 3845 68R
3913-1 3913-2 3913-3 3913-4 3914-1 3914-2 3914-3 3914-4 3915-1 3915-2 3915-3 3915-4 3916-1 3916-2 3916-3 3916-4 3917-1 3917-2 3917-3 3917-4 22R
B3a
B3a,c
B3a,c,B19d
(ONLY FOR 3D COMB)
COLUMBUS_CTRL
+3V3CA
+1V5CA
2856 2857 2858 2859 2860 2861 2862 2863 2864 100n
2865 2866 2867 2868 2869 2870 2819 2836 100n
7752-2
T6TU5XBG
CTRL
VDDS
VDDC
BISTEN
AVD
VSS
AVS
RESET
CLKSEL
CLKEXT
A0IIC
656SEL
TCK
TDI
TDO
TMS
TRST
TST1
TST2
TST3
SNDA
SNCL
SNRST
SDA
SCL
NC1
NC2
RST_COL
9804 9805 9806 9807
RES
3847 4K7
3848 4K7
3853 47K
I801
TCK TDO TDOA TMS TRST
B3a,b,c
B3b
3854 4K7
3855 4K7
I807
5800
I718
2792 100n
F735
F736
3851 4K7
3849 4K7
+5V2Pr
9815 9816 9722 9817 9818
SN-DA
SN-CL
RSTR_I
SDA-D
SCL-D
B3a,b,c(2x)
B3a,B3c(2x)
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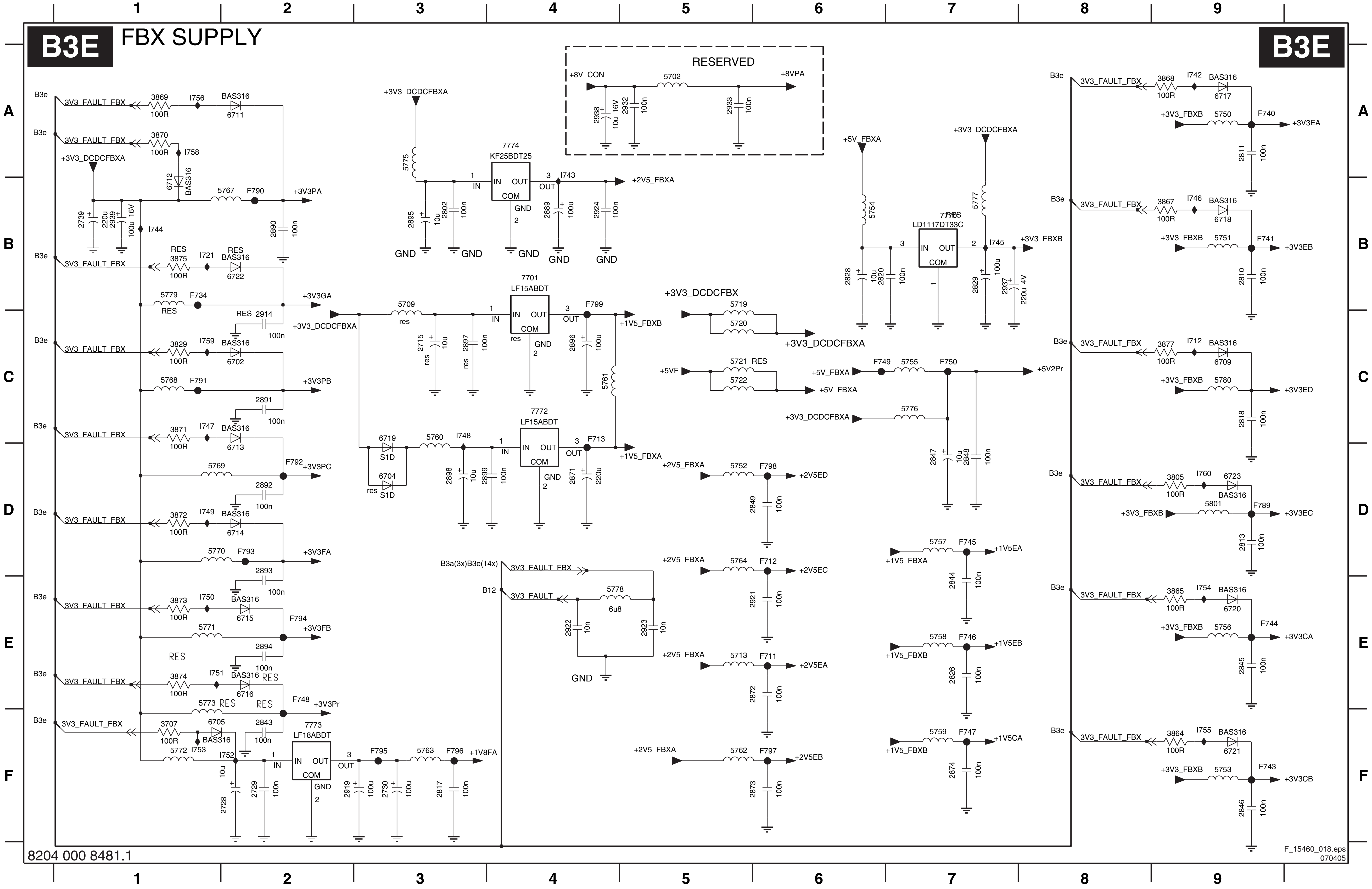
2792	F9
2819	H3
2836	H3
2850	A1
2851	A1
2852	A1
2853	A2
2854	A2
2855	A2
2856	G2
2857	G2
2858	G2
2859	G2
2860	G3
2861	G3
2862	G3
2863	G3
2864	G4
2865	H2
2866	H2
2867	H2
2868	H2
2869	H3
2870	H3
3830	B11
3831	B10
3832	B10
3833	B11
3834	B10
3835	B10
3836	B11
3837	B10
3838	B10
3839	B10
3840	B11
3841	B10
3842	C10
3843	C10
3844	C11
3845	C10
3846	D1
3847	G5
3848	G6
3849	H10
3851	H10
3853	H5
3854	F8
3855	F8
3913-1	D9
3913-2	D9
3913-3	D9
3913-4	C9
3914-1	C9
3914-2	D9
3914-3	D9
3914-4	D9
3915-1	C9
3915-2	C9
3915-3	E9
3915-4	E9
3916-1	E9
3916-2	E9
3916-3	E9
3916-4	C9
3917-1	D9
3917-2	D9
3917-3	D9
3917-4	E9
5800	F9
7752-1	A8
7752-2	G7
7753	C3
9722	H11
9800	D2
9801	D2
9802	D2
9803	D2
9804	G6
9805	G6
9806	H5
9807	H5
9812	B7
9815	G11
9816	G11
9817	H11
9818	H11
F735	H10
F736	H10
I718	F9
I801	G6
I807	F8

SSB: FBX Supply


B3E
FBX SUPPLY
B3E
RESERVED
+8V_CON
5702
+8VPA
2938 10u 16V
2932 100n
2933 100n
+3V3_DCDCFBXA
5775
7774
KF25BDT25
IN
OUT
COM
GND
I743
+2V5_FBXA
2895 10u
2802 100n
2889 100u
2924 100n
GND
3V3_FAULT_FBX
3869 100R
I756
BAS316
6711
3870 100R
I758
6712 BAS316
2739 220u
2939 100u 16V
I744
5767
F790
+3V3PA
2890 100n
RES
3875 100R
I721
6722
5779
F734
+3V3GA
2914 100n
3829 100R
I759
6702
5768
F791
+3V3PB
2891 100n
3871 100R
I747
6713
5769
F792
+3V3PC
2892 100n
3872 100R
I749
6714
5770
F793
+3V3FA
2893 100n
3873 100R
I750
6715
5771
F794
+3V3FB
2894 100n
3874 100R
I751
6716
5773
F748
+3V3Pr
3707 100R
6705
BAS316
I753
2843 100n
5772
I752
7773
LF18ABDT
F795
5763
F796
+1V8FA
2728 10u
2729 100n
2919 100u
2730 100u
2817 100n
5709 res
7701
LF15ABDT
F799
+1V5_FBXB
2715 res 10u
2897 res 100n
2896 100u
5761
6719 S1D
5760
I748
6704 res S1D
7772
LF15ABDT
F713
+1V5_FBXA
2898 10u
2899 100n
2871 220u
+3V3_DCDCFBX
5719
5720
+3V3_DCDCFBXA
+5VF
5721 RES
5722
+5V_FBXA
F749
5755
F750
+5V2Pr
5776
2847 10u
2848 100n
+5V_FBXA
5754
7770 RES
LD1117DT33C
2828 10u
2820 100n
5777
I745
+3V3_FBXB
2829 100u
2937 220u 4V
+2V5_FBXA
5752
F798
+2V5ED
2849 100n
5764
F712
+2V5EC
2921 100n
5713
F711
+2V5EA
2872 100n
5762
F797
+2V5EB
2873 100n
B3a(3x)B3e(14x)
B12
3V3_FAULT
5778 6u8
2922 10n
2923 10n
+1V5_FBXA
5757
F745
+1V5EA
2844 100n
+1V5_FBXB
5758
F746
+1V5EB
2826 100n
5759
F747
+1V5CA
2874 100n
B3e
3868 100R
I742
6717
5750
F740
+3V3EA
2811 100n
3867 100R
I746
6718
5751
F741
+3V3EB
2810 100n
3877 100R
I712
6709
5780
+3V3ED
2818 100n
3805 100R
I760
6723
5801
F789
+3V3EC
2813 100n
3865 100R
I754
6720
5756
F744
+3V3CA
2845 100n
3864 100R
I755
6721
5753
F743
+3V3CB
2846 100n
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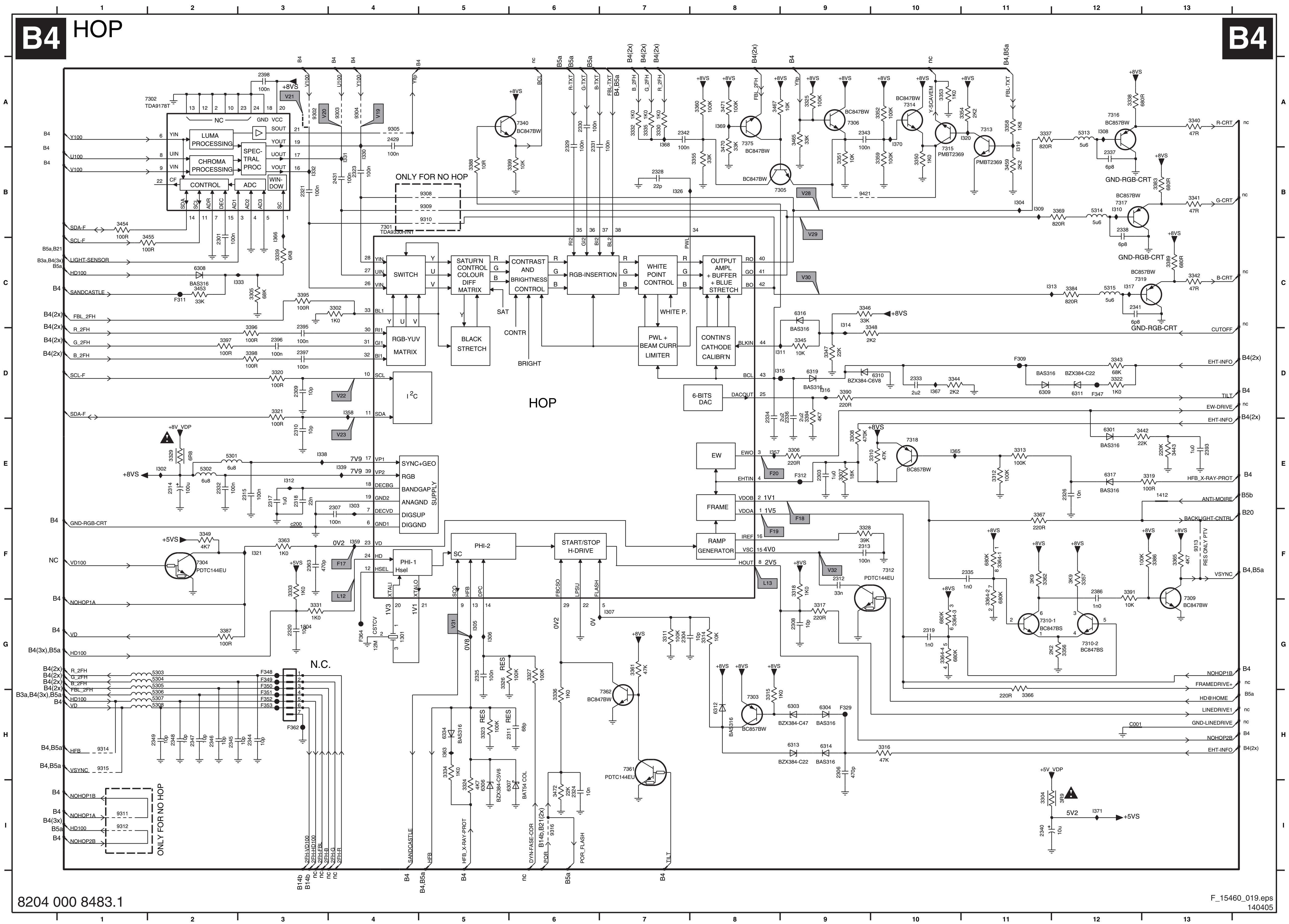
2715 C3	5777 B7
2728 F2	5778 E4
2729 F2	5779 B1
2730 F3	5780 C9
2739 B1	5801 D9
2802 B3	6702 C2
2810 B9	6704 D3
2811 A9	6705 F1
2813 D9	6709 C9
2817 F3	6711 A2
2818 C9	6712 B1
2820 B6	6713 D2
2826 E7	6714 D2
2828 B6	6715 E2
2829 B7	6716 E2
2843 F2	6717 A9
2844 E7	6718 B9
2845 E9	6719 C3
2846 F9	6720 E9
2847 D7	6721 F9
2848 D7	6722 B2
2849 D6	6723 D9
2871 D4	7701 B4
2872 E6	7770 B7
2873 F6	7772 C4
2874 F7	7773 F2
2889 B4	7774 A4
2890 B2	F711 E6
2891 C2	F712 D6
2892 D2	F713 C4
2893 D2	F734 B1
2894 E2	F740 A9
2895 B3	F741 B9
2896 C4	F743 F9
2897 C3	F744 E9
2898 D3	F745 D7
2899 D4	F746 E7
2914 C2	F747 F7
2919 F2	F748 E2
2921 E6	F749 C6
2922 E4	F750 C7
2923 E5	F789 D9
2924 B4	F790 B2
2932 A5	F791 C1
2933 A5	F792 D2
2937 B7	F793 D2
2938 A4	F794 E2
2939 B1	F795 F3
3707 F1	F796 F3
3805 D9	F797 F6
3829 C1	F798 D6
3864 F9	F799 B4
3865 E9	I712 C9
3867 B9	I721 B1
3868 A9	I742 A9
3869 A1	I743 A4
3870 A1	I744 B1
3871 C1	I745 B7
3872 D1	I746 B9
3873 E1	I747 C1
3874 E1	I748 C3
3875 B1	I749 D1
3877 C9	I750 E1
5702 A5	I751 E1
5709 B3	I752 F2
5713 E5	I753 F1
5719 B5	I754 E9
5720 C5	I755 F9
5721 C5	I756 A1
5722 C5	I758 A1
5750 A9	I759 C1
5751 B9	I760 D9
5752 D5	
5753 F9	
5754 B6	
5755 C7	
5756 E9	
5757 D7	
5758 E7	
5759 F7	
5760 C3	
5761 C4	
5762 F5	
5763 F3	
5764 D5	
5767 B2	
5768 C1	
5769 D1	
5770 D1	
5771 E1	
5772 F1	
5773 E1	
5775 A3	
5776 C7	

SSB: HOP


B4
HOP
B4
7302
TDA9178T
LUMA PROCESSING
CHROMA PROCESSING
SPEC-TRAL PROC
CONTROL
ADC
WIN-DOW
ONLY FOR NO HOP
7301
TDA9330H/N1
SWITCH
SATUR'N CONTROL COLOUR DIFF MATRIX
CONTRAST AND BRIGHTNESS CONTROL
RGB-INSERTION
WHITE POINT CONTROL
OUTPUT AMPL + BUFFER + BLUE STRETCH
RGB-YUV MATRIX
BLACK STRETCH
PWL + BEAM CURR LIMITER
CONTIN'S CATHODE CALIBR'N
I^2C
HOP
6-BITS DAC
SYNC+GEO
RGB
BANDGAP
ANAGND
DIGSUP
DIGGND
SUPPLY
EW
FRAME
RAMP GENERATOR
PHI-1 Hsel
PHI-2
START/STOP H-DRIVE
N.C.
ONLY FOR NO HOP
R-CRT
G-CRT
B-CRT
GND-RGB-CRT
CUTOFF
EHT-INFO
TILT
EW-DRIVE
HFB_X-RAY-PROT
ANTI-MOIRE
BACKLIGHT-CNTRL
VSYNC
NOHOP1B
FRAMEDRIVE+
HD@HOME
LINEDRIVE1
GND-LINEDRIVE
NOHOP2B
RES ONLY PTV
+5V VDP
+5VS
+8VS
Y100
U100
V100
SDA-F
SCL-F
LIGHT-SENSOR
HD100
SANDCASTLE
FBL_2FH
R_2FH
G_2FH
B_2FH
GND-RGB-CRT
VD100
NOHOP1A
VD
HFB
VSYNC
NOHOP2B
DYN-FASE-COR
POR_FLASH
HFB_X-RAY-PROT
TILT

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1301 G4
1304 G3
1412 E13
2301 B2
2303 E9
2304 G7
2306 H9
2307 F4
2308 G9
2309 D3
2310 E3
2311 H6
2312 F9
2313 F9
2314 E2
2315 E3
2317 E3
2318 E3
2319 G10
2320 G3
2321 B3
2323 B4
2324 I6
2325 G5
2326 E12
2328 B7
2329 A6
2330 A6
2331 A6
2332 E2
2333 D10
2334 D8
2335 F11
2336 D9
2337 B12
2338 B12
2340 I11
2341 C12
2342 A7
2343 A9
2344 H3
2345 H2
2346 H2
2347 H2
2348 H2
2349 H2
2363 F3
2386 F12
2393 E13
2395 D3
2396 D3
2397 D3
2398 A3
2429 A4
2431 B4
3302 C4
3304 I11
3305 C3
3306 E9
3307 E9
3308 E9
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3311 G7
3312 E11
3313 E11
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3318 F9
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3320 D3
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3322 D12
3323 H5
3324 I5
3325 A9
3326 G5
3327 G6
3328 F9
3329 E2
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3340 A13
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3358 A11
3359 B10
3360 A8
3361 G7
3362 F11
3363 F3
3364-1 F11
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3364-3 G10
3364-4 G10
3365 F13
3366 H11
3367 F11
3369 B12
3383 B13
3384 C12
3386 F13
3387 G2
3388 B5
3389 C13
3390 D9
3391 F12
3394 D9
3395 C3
3396 D3
3397 D2
3398 D3
3399 B6
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3453 C2
3454 B2
3455 C2
3459 B11
3465 A9
3467 A8
3470 A8
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5303 G2
5304 G2
5305 G2
5306 H2
5307 H2
5308 H2
5313 A12
5314 B12
5315 C12
6301 E12
6303 H9
6304 H9
6306 I5
6307 I6
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6309 D11
6310 D10
6311 D12
6312 H8
6313 H9
6314 H9
6316 C9
6317 E12
6319 D9
6334 H5
7301 B4
7302 A1
7303 H8
7304 F2
7305 B9
7306 A9
7309 G13
7310-1 G11
7310-2 G12
7312 F10
7313 A11
7314 A10
7315 A10
7316 A12
7317 B12
7318 E10
7319 C12
7340 A6
7361 H7
7362 H7
7375 A8
9302 A3
9303 A4
9304 A4
9305 A4
9308 B5
9309 B5
9310 B5
9311 I1
9312 I1
9313 F13
9314 H1
9315 H1
9316 I6
9421 B9
C001 H12
F309 D11
F311 C2
F312 E9
F329 H9
F347 D12
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F350 G3
F351 H3
F352 H3
F353 H3
F362 H3
F364 F4
I302 E2
I303 E4
I304 B11
I305 G5
I306 G5
I307 G7
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I309 B11
I310 B12
I311 D9
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I313 C12
I314 C9
I315 D8
I316 D9
I317 C12
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I321 F3
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I332 B3
I333 C3
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I339 E4
I357 E8
I358 D4
I359 F4
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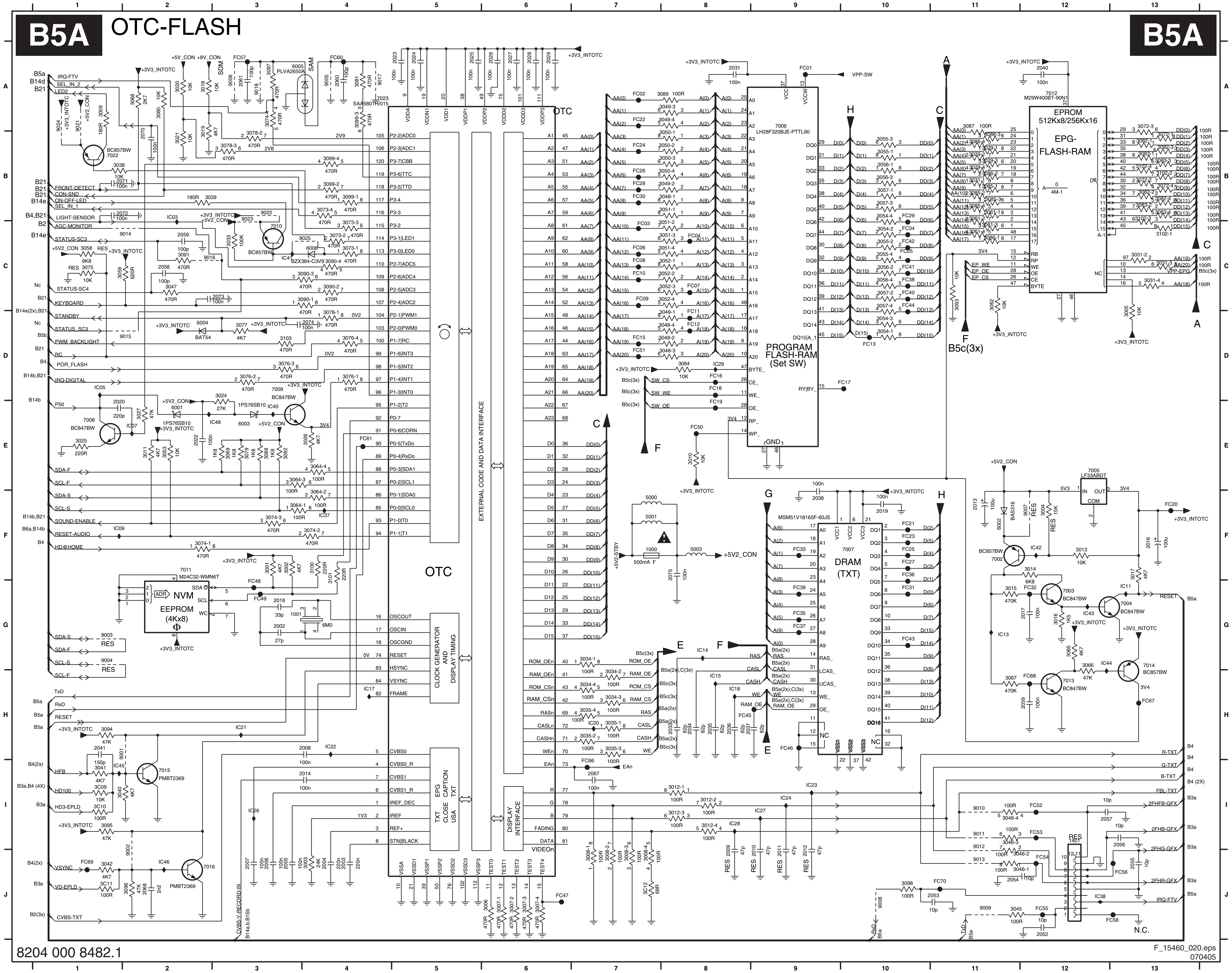
I371 I12
c200 F3

SSB: OTC-Flash


B5A
OTC-FLASH
OTC
EXTERNAL CODE AND DATA INTERFACE
CLOCK GENERATOR AND DISPLAY TIMING
EPG CAPTION CLOSE USA TXT
DISPLAY INTERFACE
PROGRAM FLASH-RAM (Set SW)
LH28F320BJE-PTTL90
EPROM 512Kx8/256Kx16
EPG-FLASH-RAM
M29W400BT-90N1
DRAM (TXT)
MSM51V18165F-60JS
NVM EEPROM (4Kx8)
M24C32-WMN6T
SAA5801H/015
LF33ABDT
BC857BW
BC847BW
PMBT2369
BZX384-C3V9
BAT54
1PS76SB10
PLVA2650A
6M0
+3V3_INTOTC
+5V2_CON
+5V_CON
+8V_CON
+5V2_STBY
VPP-SW
IRQ-FTV
SEL_IN_2
LED2
FRONT-DETECT
CON-SND
ON-OFF-LED
SEL_IN_1
LIGHT-SENSOR
AGC-MONITOR
STATUS-SC3
STATUS-SC4
KEYBOARD
STANDBY
STATUS_SC3
PWM_BACKLIGHT
RC
POR_FLASH
IRQ-DIGITAL
P50
SDA-F
SCL-F
SDA-S
SCL-S
SOUND-ENABLE
RESET-AUDIO
HD@HOME
TxD
RxD
RESET
HFB
HD100
HD3-EPLD
VSYNC
VD-EPLD
CVBS-TXT
CVBS-V-RECORD-IN
R-TXT
G-TXT
B-TXT
FBL-TXT
2FHFB-GFX
2FHB-GFX
2FHG-GFX
2FHR-GFX
IRQ-FTV
N.C.
8204 000 8482.1
F_15460_020.eps
070405

1000 F7
1001 G3
1401 I12
2002 G3
2003 J4
2004 J4
2005 J3
2006 J3
2007 J3
2008 H4
2009 J8
2010 J9
2011 J9
2012 J9
2013 F11
2014 I4
2016 F13
2017 G12
2018 G3
2019 F10
2020 E1
2022 E2
2023 A5
2024 A5
2025 A5
2026 A6
2027 A6
2028 A6
2029 A6
2031 A8
2033 H8
2034 H8
2035 H8
2036 H8
2037 H8
2038 F9
2039 H12
2040 A12
2041 H1
2052 J12
2053 J11
2054 J11
2055 J13
2056 I13
2057 I12
2058 C2
2059 C2
2060 A4
2061 A3
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2068 J2
2070 B2
2071 B1
2072 B1
2073 C3
2074 D4
2075 F8
3001 F3
3002 F3
3003 J4
3004 F12
3005 D13
3006 J6
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3007-2 J6
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3007-4 J6
3008-1 J7
3008-2 J7
3008-3 J7
3008-4 J7
3009 A1
3010 E8
3011 E2
3012-1 I8
3012-2 I8
3012-3 I8
3012-4 I8
3013 F12
3014 F12
3015 G11
3016 G12
3017 F13
3018 A2
3019 B2
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3029-4 B11
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3031-2 C13
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3051-2 C8
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3052-1 C8
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3054-2 C10
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3089 A8
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3095 I1
3096 J2
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3098 J10
3099-1 B4
3099-2 B4
3099-3 A4
3099-4 B4
3100 F4
3101 F4
3102-1 C13
3102-2 B13
3102-3 B13
3102-4 B13
3103 D3
3C09 I1
3C10 I1
3C11 J1
3C12 J7
5000 F7
5001 F7
5003 F8
6001 E2
6002 F11
6003 E3
6004 D2
6005 A3
6006 C4
7002 F11
7003 G12
7004 G13
7005 E12
7006 A9
7007 F10
7008 E1
7009 D3
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7011 F2
7012 A12
7013 H12
7014 G13
7015 I2
7016 J2
7022 B1
7023 A4
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9002 J2
9003 G1
9004 G1
9005 A4
9006 A3
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9008 J10
9009 J11
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9011 I11
9012 I11
9013 J11
9014 C2
9015 D2
9016 C2
9017 A4
9018 A3
9021 A1
9022 B3
9023 B3
9024 A1
9025 C4
FC01 A9
FC02 A7
FC03 C7
FC04 C8
FC05 C10
FC06 C7
FC07 C8
FC08 C7
FC09 C7
FC10 C7
FC11 D8
FC12 D8
FC13 D10
FC15 D7
FC16 D8
FC17 D10
FC18 D8
FC19 E8
FC20 F13
FC21 F10
FC22 A7
FC23 F10
FC24 B7
FC25 F10
FC26 B7
FC27 F10
FC28 B7
FC29 B10
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FC31 G10
FC32 G12
FC33 F9
FC34 C10
FC35 G9
FC36 F10
FC37 G9
FC38 C10
FC39 G9
FC40 C10
FC41 C10
FC42 C10
FC43 G10
FC44 C10
FC45 H8
FC46 H9
FC47 J6
FC48 G3
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FC53 I12
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FC61 E4
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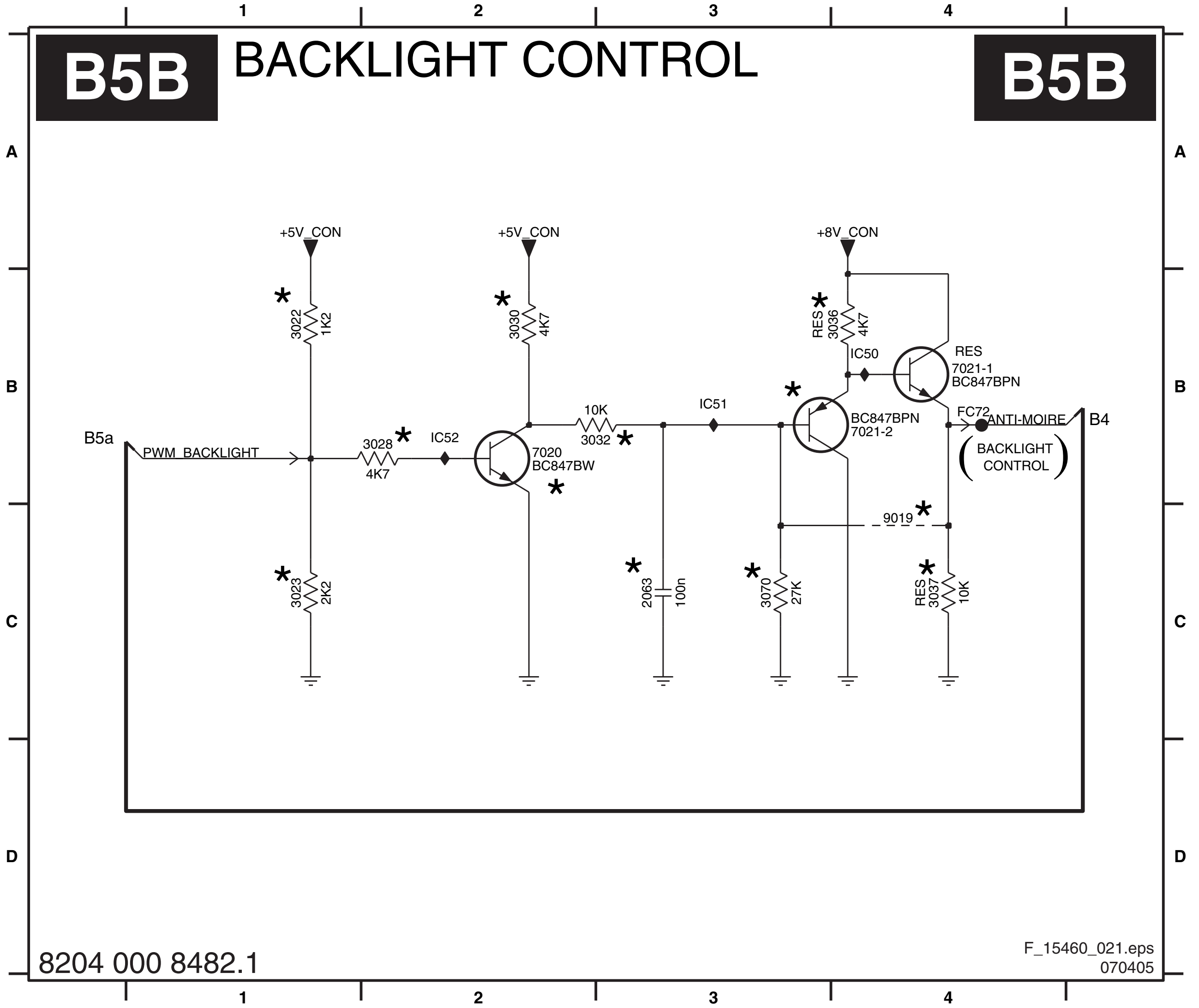
FC67 H13
FC68 H12
FC69 J1
FC70 J11
IC03 B2
IC05 D1
IC07 E2
IC09 F1
IC11 G13
IC13 G11
IC14 G8
IC15 H8
IC17 H4
IC18 H8
IC20 H7
IC21 H3
IC22 H4
IC23 I9
IC24 I9
IC26 I3
IC27 I9
IC28 I8
IC29 D8
IC37 F4
IC38 J12
IC40 E3
IC41 C3
IC42 F12
IC43 G12
IC44 G12
IC45 I1
IC46 J2
IC48 E3

SSB: Backlight Control

2063 C3 3023 C1 3030 B2 3036 B4 3070 C3 7021-1 B4 9019 C4 IC50 B4 IC52 B2
3022 B1 3028 B2 3032 B2 3037 C4 7020 B2 7021-2 B4 FC72 B4 IC51 B3


B5B
BACKLIGHT CONTROL
B5B
+5V_CON
+5V_CON
+8V_CON
3022 1K2
3030 4K7
RES 3036 4K7
IC50
RES 7021-1 BC847BPN
BC847BPN 7021-2
7020 BC847BW
10K 3032
IC51
IC52
3028 4K7
B5a
PWM_BACKLIGHT
FC72
ANTI-MOIRE
B4
(BACKLIGHT CONTROL)
9019
3023 2K2
2063 100n
3070 27K
RES 3037 10K
8204 000 8482.1
F_15460_021.eps
070405
1 2 3 4
A B C D

SSB: OTC-Flash

1402 C1 2C01 B3 3C01 A2 3C05 D2 3C06-3 C4 3C07-2 C4 3C08 B2 7019 E3 9C02 D1 FC64 F3
1404 B1 2C02 E3 3C03 B2 3C06-1 B4 3C06-4 C4 3C07-3 C4 7017 B1 9C00 A2 FC62 F3 FC65 C1
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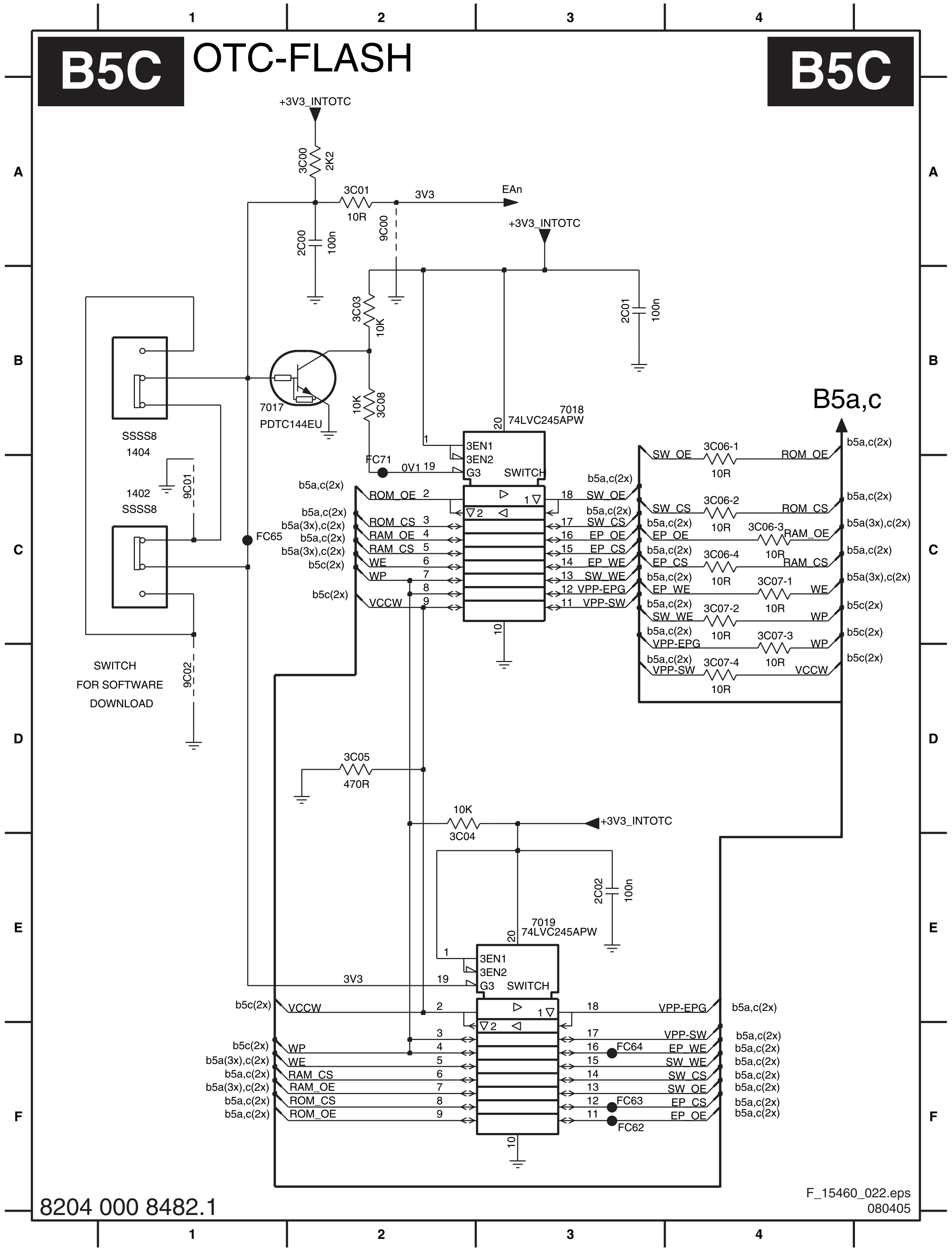
B5C
OTC-FLASH
B5C
+3V3_INTOTC
3C00 2K2
3C01 10R
3V3
EAn
2C00 100n
9C00
+3V3_INTOTC
3C03 10K
2C01 100n
SSSS8 1404
7017 PDTC144EU
10K 3C08
7018 74LVC245APW
B5a,c
FC71
0V1
3EN1
3EN2
G3
SWITCH
1402 SSSS8
9C01
FC65
ROM_OE
ROM_CS
RAM_OE
RAM_CS
WE
WP
VCCW
SW_OE
SW_CS
EP_OE
EP_CS
EP_WE
SW_WE
VPP-EPG
VPP-SW
b5a,c(2x)
b5a(3x),c(2x)
b5c(2x)
3C06-1 10R
3C06-2 10R
3C06-3 10R
3C06-4 10R
3C07-1 10R
3C07-2 10R
3C07-3 10R
3C07-4 10R
SWITCH FOR SOFTWARE DOWNLOAD
9C02
3C05 470R
10K 3C04
+3V3_INTOTC
2C02 100n
7019 74LVC245APW
3V3
FC64
FC63
FC62
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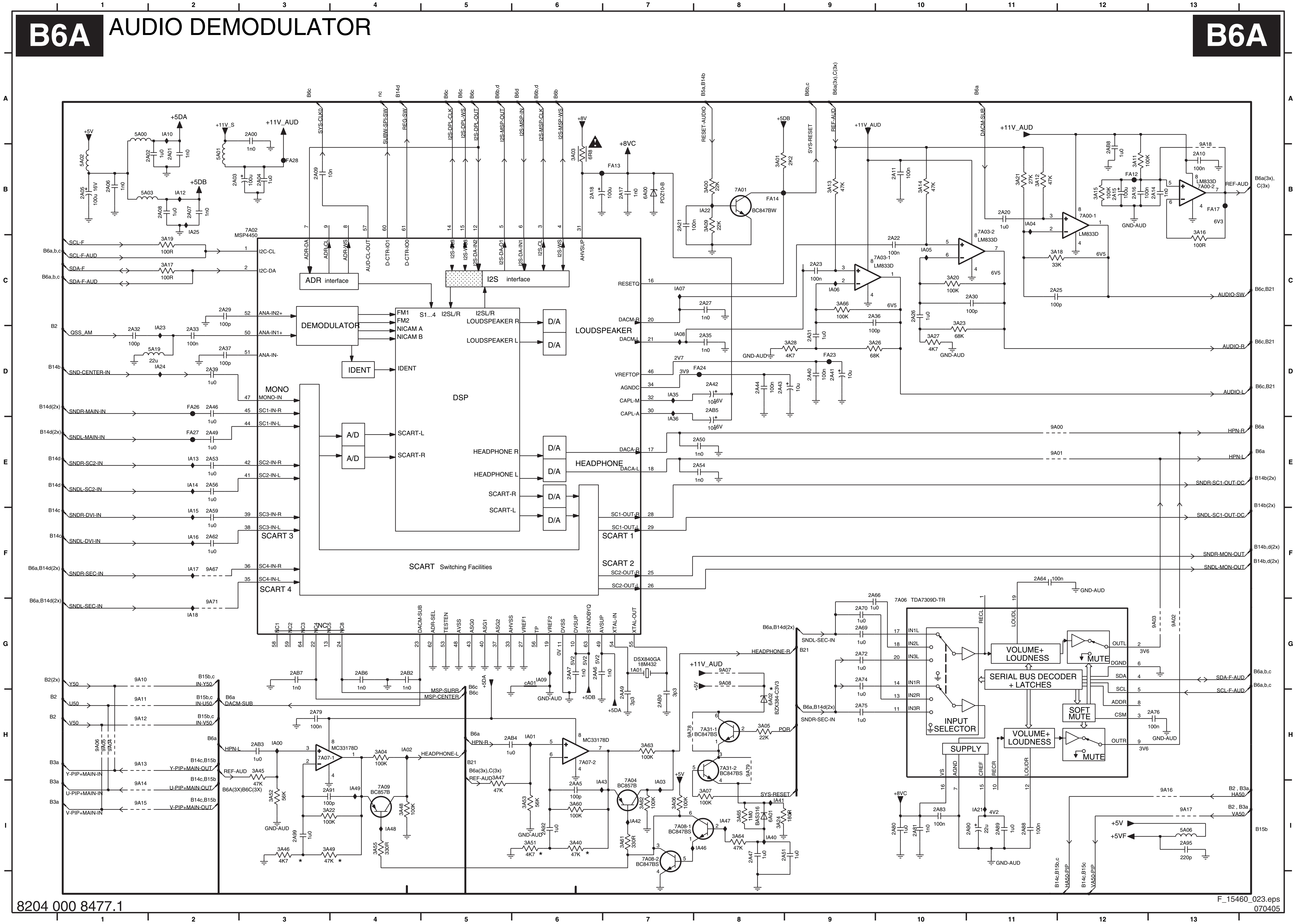
F_15460_022.eps
080405
1 2 3 4
A B C D E F

SSB: Audio Demodulator


B6A
AUDIO DEMODULATOR
B6A
7A02 MSP4450
DEMODULATOR
IDENT
ADR interface
I2S interface
DSP
LOUDSPEAKER
HEADPHONE
SCART Switching Facilities
SCART 1
SCART 2
SCART 3
SCART 4
MONO
D/A
A/D
7A06 TDA7309D-TR
INPUT SELECTOR
VOLUME+ LOUDNESS
SERIAL BUS DECODER + LATCHES
SOFT MUTE
MUTE
SUPPLY
7A00-1 LM833D
7A00-2 LM833D
7A03-1 LM833D
7A03-2 LM833D
7A07-1 MC33178D
7A07-2 MC33178D
7A01 BC847BW
7A09 BC857B
7A04 BC857B
7A31-1 BC847BS
7A31-2 BC847BS
7A08-1 BC847BS
7A08-2 BC847BS
+5DA
+5DB
+11V_AUD
+8V
+8VC
+5V
+5VF
GND-AUD
AUDIO-SW
AUDIO-R
AUDIO-L
HPN-R
HPN-L
SNDR-SC1-OUT-DC
SNDL-SC1-OUT-DC
SNDR-MON-OUT
SNDL-MON-OUT
SDA-F-AUD
SCL-F-AUD
REF-AUD
HA50
VA50
8204 000 8477.1
F_15460_023.eps
070405

1A00 G7
1A01 G7
2A00 A3
2A01 B2
2A02 B2
2A03 B2
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2A21 B7
2A22 C10
2A23 C9
2A25 C11
2A26 C10
2A27 C8
2A29 C2
2A30 C11
2A31 D9
2A32 D1
2A33 D2
2A35 D8
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2A53 E2
2A54 E8
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2A69 G9
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2A72 G9
2A74 G9
2A75 H9
2A76 H13
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2A92 I6
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2A99 I3
2AA5 I6
2AA6 G6
2AA7 G6
2AA9 H7
2AB0 H7
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3A05 H8
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3A07 I8
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3A17 C2
3A18 C11
3A19 C2
3A20 C10
3A21 B11
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3A23 C10
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3A26 D9
3A27 D10
3A28 D9
3A40 I6
3A45 H3
3A46 I3
3A47 H5
3A48 I4
3A49 I3
3A51 I6
3A52 I3
3A53 I6
3A55 I4
3A60 I6
3A61 I7
3A62 I7
3A63 H7
3A64 I8
3A65 I8
3A66 C9
5A00 A1
5A01 B2
5A02 B1
5A03 B1
5A06 I13
5A19 D2
6A00 B7
6A01 I8
6A02 H8
7A00-1 B12
7A00-2 B13
7A01 B8
7A02 B3
7A03-1 C9
7A03-2 B11
7A04 I7
7A06 G10
7A07-1 H3
7A07-2 H6
7A08-1 I7
7A08-2 I7
7A09 I4
7A31-1 H8
7A31-2 H8
9A00 E11
9A01 E11
9A02 G13
9A03 G13
9A04 H1
9A05 H1
9A06 H1
9A07 G8
9A08 G8
9A10 G1
9A11 H1
9A12 H1
9A13 H1
9A14 I1
9A15 I1
9A16 I13
9A17 I13
9A18 B13
9A67 F2
9A71 G2
9A78 H7
9A79 H8
FA12 B12
FA13 B7
FA14 B8
FA17 B13
FA23 D9
FA24 D8
FA26 D2
FA27 E2
FA28 B3
IA00 H3
IA01 H6
IA02 H4
IA03 I7
IA04 B11
IA05 C10
IA06 C9
IA07 C7
IA08 D7
IA09 G6
IA10 A2
IA12 B2
IA13 E2
IA14 E2
IA15 F2
IA16 F2
IA17 F2
IA18 G2
IA21 I11
IA22 B8
IA23 D2
IA24 D2
IA25 B2
IA35 D7
IA36 E7
IA40 I8
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IA46 I8
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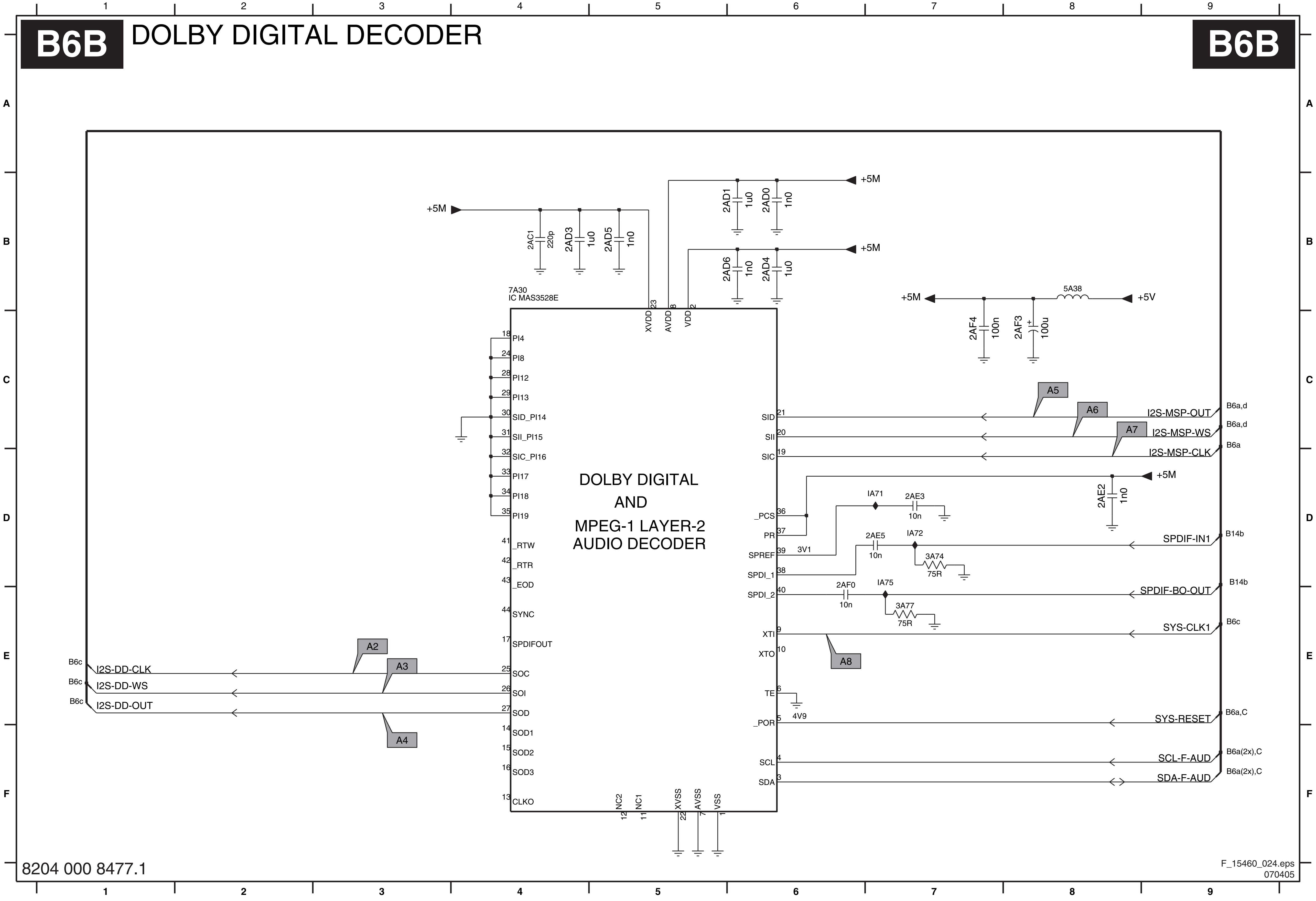
IA48 I4
IA49 I4
cA01 G6

SSB: Dolby Digital Decoder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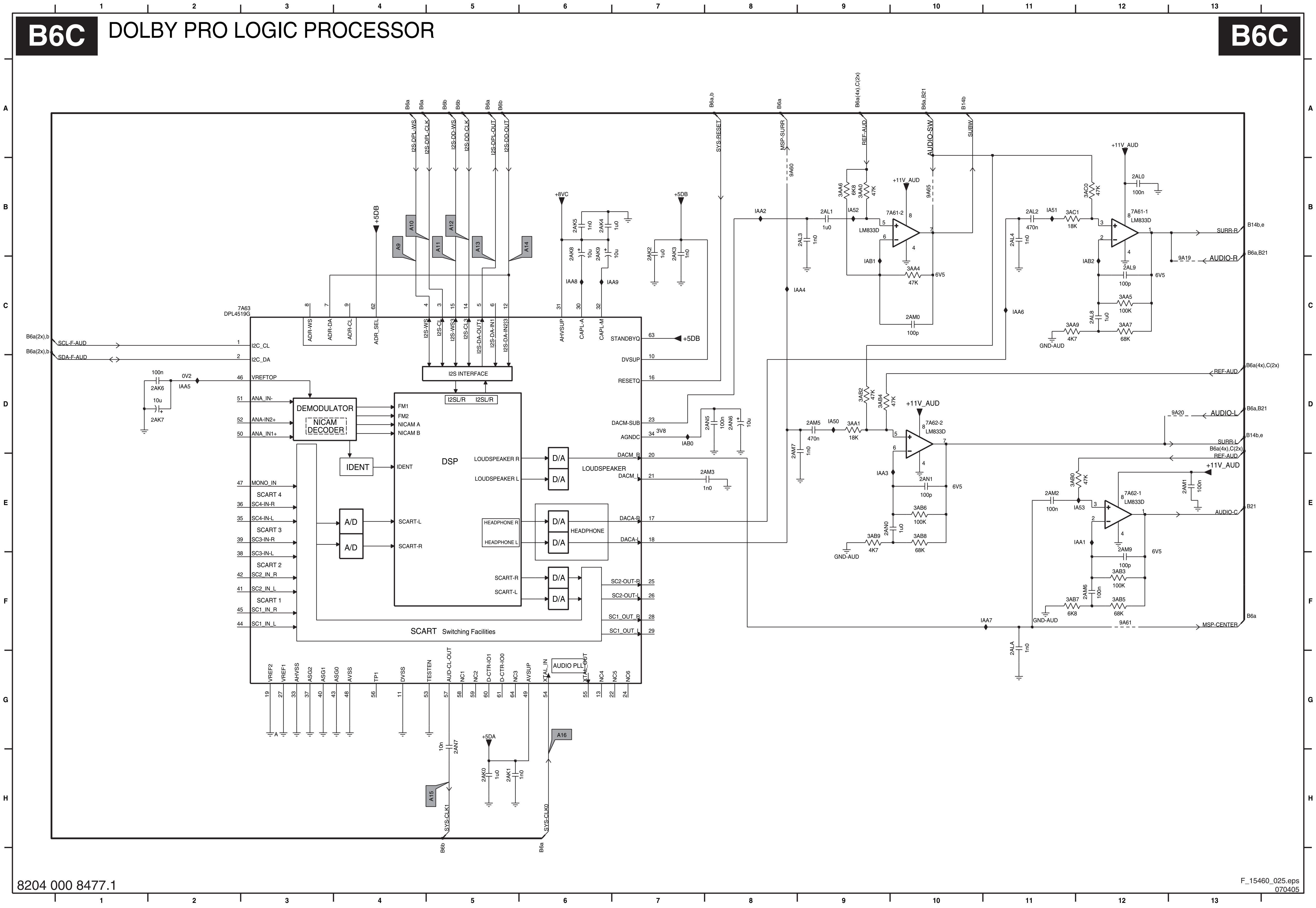
DOLBY DIGITAL DECODER
B6B
1 2 3 4 5 6 7 8 9
A B C D E F
+5M
2AC1
220p
2AD3
1u0
2AD5
1n0
2AD1
1u0
2AD0
1n0
2AD6
1n0
2AD4
1u0
+5M
+5M
5A38
+5V
2AF4
100n
2AF3
100u
7A30
IC MAS3528E
XVDD 23
AVDD 8
VDD 2
18 PI4
24 PI8
28 PI12
29 PI13
30 SID_PI14
31 SII_PI15
32 SIC_PI16
33 PI17
34 PI18
35 PI19
41 _RTW
42 _RTR
43 _EOD
44 SYNC
17 SPDIFOUT
25 SOC
26 SOI
27 SOD
14 SOD1
15 SOD2
16 SOD3
13 CLKO
NC2 12
NC1 11
XVSS 22
AVSS 7
VSS 1
DOLBY DIGITAL
AND
MPEG-1 LAYER-2
AUDIO DECODER
SID 21
SII 20
SIC 19
_PCS 36
PR 37
SPREF 39
SPDI_1 38
SPDI_2 40
XTI 9
XTO 10
TE 6
_POR 5
SCL 4
SDA 3
3V1
4V9
A5
A6
A7
A8
A2
A3
A4
I2S-MSP-OUT
B6a,d
I2S-MSP-WS
B6a,d
I2S-MSP-CLK
B6a
+5M
2AE2
1n0
IA71
2AE3
10n
2AE5
10n
IA72
3A74
75R
SPDIF-IN1
B14b
2AF0
10n
IA75
3A77
75R
SPDIF-BO-OUT
B14b
SYS-CLK1
B6c
SYS-RESET
B6a,C
SCL-F-AUD
B6a(2x),C
SDA-F-AUD
B6a(2x),C
B6c
I2S-DD-CLK
B6c
I2S-DD-WS
B6c
I2S-DD-OUT
8204 000 8477.1
F_15460_024.eps
070405

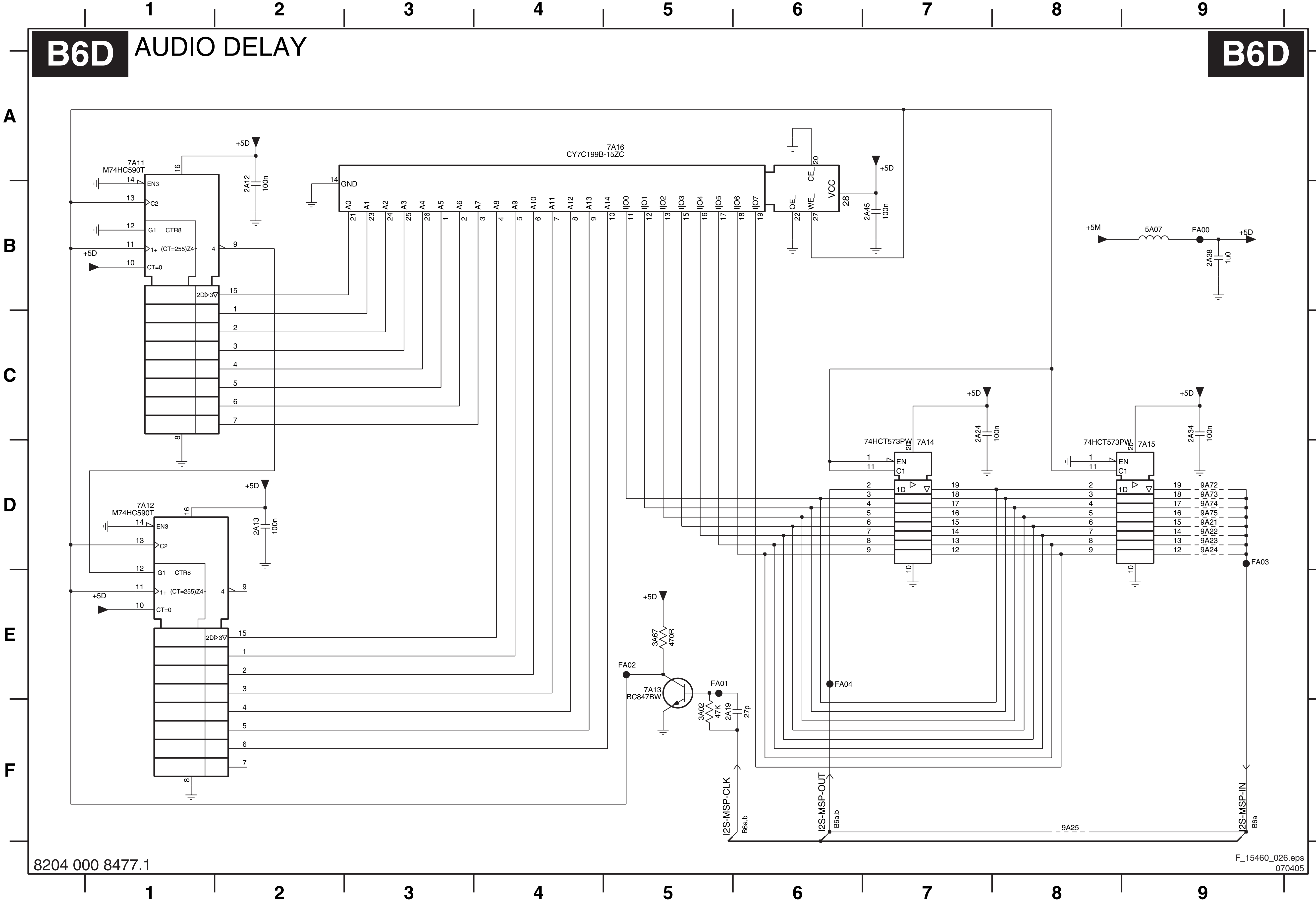
2AC1	B4
2AD0	B6
2AD1	B6
2AD3	B4
2AD4	B6
2AD5	B5
2AD6	B6
2AE2	D8
2AE3	D7
2AE5	D7
2AF0	E6
2AF3	C8
2AF4	C7
3A74	D7
3A77	E7
5A38	B8
7A30	B4
IA71	D7
IA72	D7
IA75	D7

SSB: Dolby Pro Logic Processor


B6C
DOLBY PRO LOGIC PROCESSOR
B6C
1
2
3
4
5
6
7
8
9
10
11
12
13
A
B
C
D
E
F
G
H
I2S-DPL-WS
I2S-DPL-CLK
I2S-DD-WS
I2S-DD-CLK
I2S-DPL-OUT
I2S-DD-OUT
SYS-RESET
MSP-SURR
REF-AUD
AUDIO-SW
SUBW
+5DB
+8VC
+11V_AUD
7A63
DPL4519G
SCL-F-AUD
SDA-F-AUD
I2C_CL
I2C_DA
VREFTOP
ANA_IN-
ANA_IN2+
ANA_IN1+
MONO_IN
SCART 4
SC4-IN-R
SC4-IN-L
SCART 3
SC3-IN-R
SC3-IN-L
SCART 2
SC2_IN_R
SC2_IN_L
SCART 1
SC1_IN_R
SC1_IN_L
DEMODULATOR
NICAM DECODER
IDENT
A/D
DSP
I2S INTERFACE
I2SL/R
FM1
FM2
NICAM A
NICAM B
LOUDSPEAKER R
LOUDSPEAKER L
LOUDSPEAKER
HEADPHONE R
HEADPHONE L
HEADPHONE
SCART-L
SCART-R
D/A
SCART Switching Facilities
STANDBYQ
DVSUP
RESETQ
DACM-SUB
AGNDC
DACM_R
DACM_L
DACA-R
DACA-L
SC2-OUT-R
SC2-OUT-L
SC1_OUT_R
SC1_OUT_L
AUDIO PLL
SYS-CLK1
SYS-CLK0
7A61-1
7A61-2
7A62-1
7A62-2
LM833D
SURR-R
AUDIO-R
AUDIO-L
SURR-L
AUDIO-C
MSP-CENTER
GND-AUD
6V5
A9
A10
A11
A12
A13
A14
A15
A16
8204 000 8477.1
F_15460_025.eps
070405

2AK0	G5
2AK1	G5
2AK2	B7
2AK3	B7
2AK4	B6
2AK5	B6
2AK6	D2
2AK7	D2
2AK8	B6
2AK9	B6
2AL0	B12
2AL1	B9
2AL2	B11
2AL3	B9
2AL4	B11
2AL8	C12
2AL9	C12
2ALA	F11
2AM0	C10
2AM1	E13
2AM2	E11
2AM3	E7
2AM5	D9
2AM6	F12
2AM7	D8
2AM9	E12
2AN0	E9
2AN1	E10
2AN5	D7
2AN6	D8
2AN7	G5
3AA0	B9
3AA1	D9
3AA4	C10
3AA5	C12
3AA6	B9
3AA7	C12
3AA9	C11
3AB0	E11
3AB2	D9
3AB3	F12
3AB4	D9
3AB5	F12
3AB6	E10
3AB7	F11
3AB8	E10
3AB9	E9
3AC0	B12
3AC1	B11
7A61-A	B12
7A61-B	B10
7A62-A	E12
7A62-B	D10
7A63	C3
9A19	C13
9A20	D13
9A60	B8
9A61	F12
9A65	B10
IA50	D9
IA51	B11
IA52	B9
IA53	E12
IAA1	E12
IAA2	B8
IAA3	E9
IAA4	C9
IAA5	D2
IAA6	C11
IAA7	F11
IAA8	C6
IAA9	C7
IAB0	D7
IAB1	C9
IAB2	C12

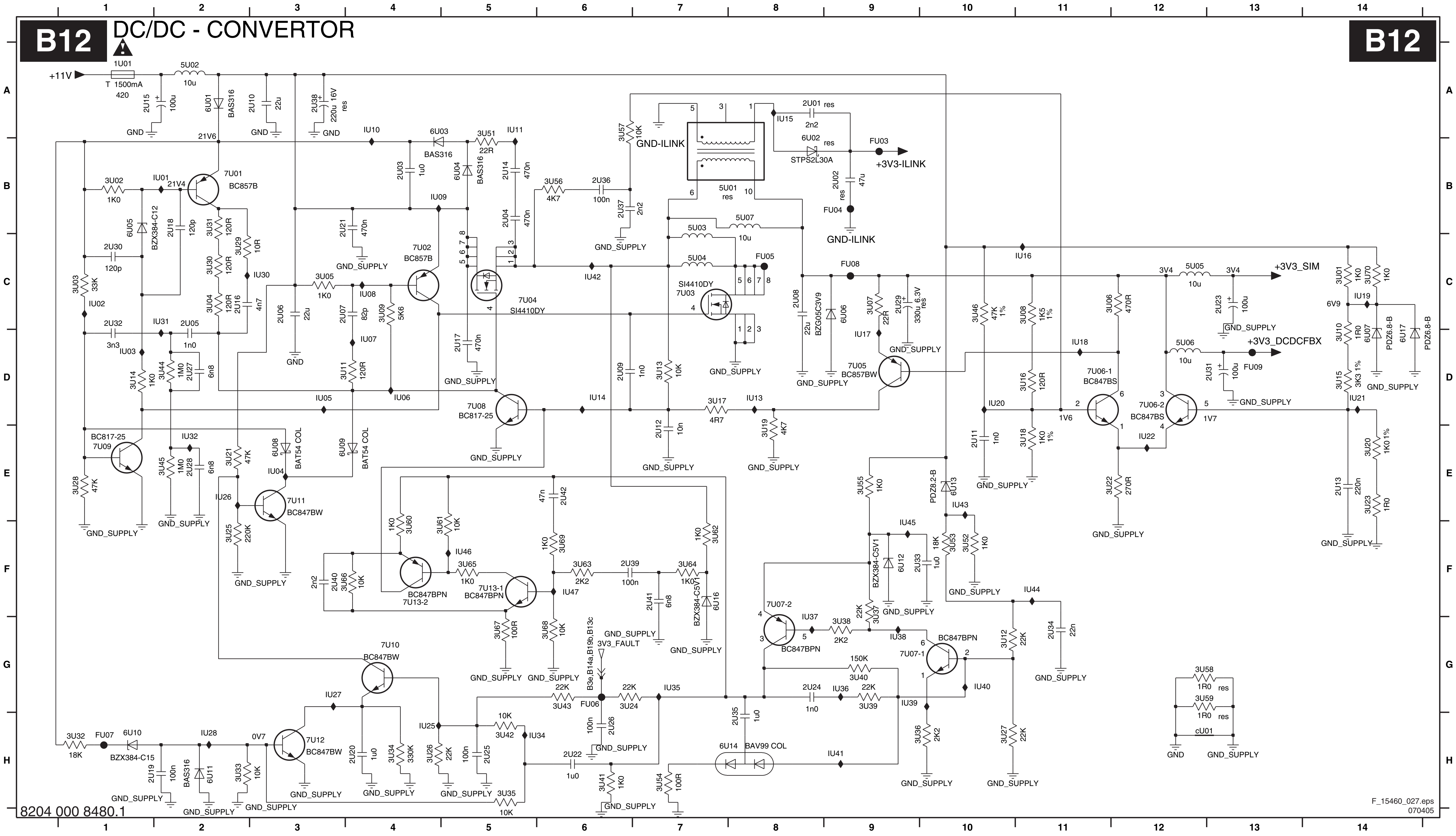
SSB: Audio Delay


B6D
AUDIO DELAY
B6D
1 2 3 4 5 6 7 8 9
A B C D E F
7A11
M74HC590T
EN3
C2
G1 CTR8
1+ (CT=255)Z4
CT=0
2D▷3▽
+5D
2A12
100n
7A12
M74HC590T
2A13
100n
7A16
CY7C199B-15ZC
GND
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14
IO0 IO1 IO2 IO3 IO4 IO5 IO6 IO7
OE_ WE_ CE_ VCC
2A45
100n
+5M
5A07
FA00
2A38
1u0
74HCT573PW 7A14
74HCT573PW 7A15
EN
C1
1D
2A24
100n
2A34
100n
9A72
9A73
9A74
9A75
9A21
9A22
9A23
9A24
FA03
FA04
FA02
FA01
3A67
470R
7A13
BC847BW
3A02
47K
2A19
27p
I2S-MSP-CLK
B6a,b
I2S-MSP-OUT
B6a,b
I2S-MSP-IN
B6a
9A25
8204 000 8477.1
F_15460_026.eps
070405

2A12	B2
2A13	D2
2A19	F5
2A24	C7
2A34	C9
2A38	B9
2A45	B7
3A02	F5
3A67	E5
5A07	B9
7A11	A1
7A12	D1
7A13	E5
7A14	D7
7A15	D9
7A16	A5
9A21	D9
9A22	D9
9A23	D9
9A24	D9
9A25	F8
9A72	D9
9A73	D9
9A74	D9
9A75	D9
FA00	B9
FA01	E5
FA02	E5
FA03	D9
FA04	E6

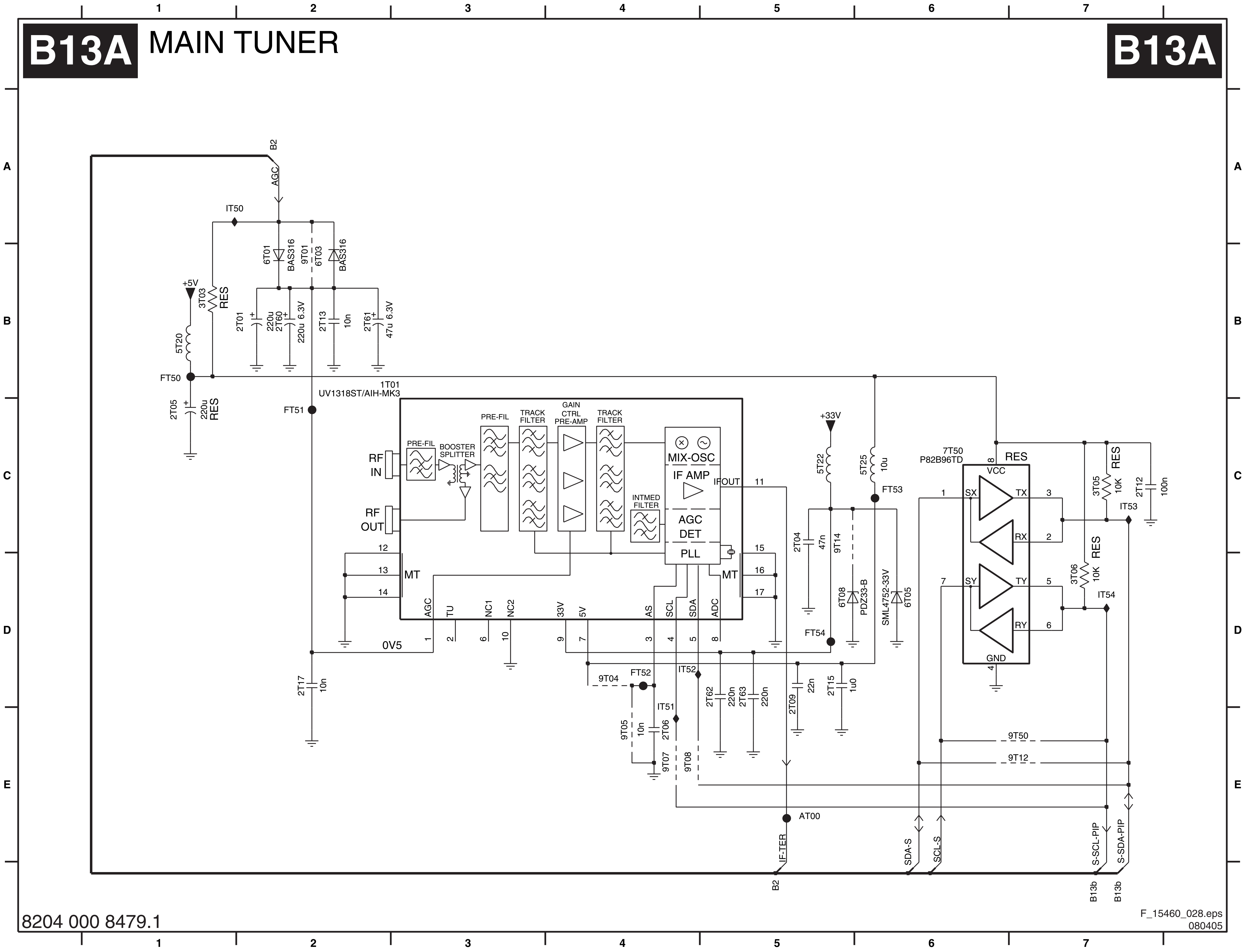
SSB: DC/DC Convertor

1U01 A1
2U01 A8
2U02 B9
2U03 B4
2U04 B5
2U05 C2
2U06 C3
2U07 C3
2U08 C8
2U09 D6
2U10 A3
2U11 E10
2U12 E7
2U13 E14
2U14 B5
2U15 A1
2U16 C2
2U17 D5
2U18 B2
2U19 H1
2U20 H4
2U21 B3
2U22 H6
2U23 C13
2U24 G8
2U25 H5
2U26 H6
2U27 D2
2U28 E2
2U29 C9
2U30 C1
2U31 D13
2U32 C1
2U33 F10
2U34 G11
2U35 H8
2U36 B6
2U37 B6
2U38 A3
2U39 F6
2U40 F3
2U41 F7
2U42 E6
3U01 C14
3U02 B1
3U03 C1
3U04 C2
3U05 C3
3U06 C12
3U07 C9
3U08 C11
3U09 C4
3U10 D14
3U11 D4
3U12 G10
3U13 D7
3U14 D1
3U15 D14
3U16 D11
3U17 D7
3U18 E11
3U19 E8
3U20 E14
3U21 E2
3U22 E12
3U23 E14
3U24 G6
3U25 F2
3U26 H4
3U27 H10
3U28 E1
3U29 C2
3U30 C2
3U31 B2
3U32 H1
3U33 H2
3U34 H4
3U35 H5
3U36 H10
3U37 F9
3U38 G9
3U39 G9
3U40 G9
3U41 H6
3U42 H5
3U43 G6
3U44 D2
3U45 E2
3U46 C10
3U51 A5
3U52 F10
3U53 F10
3U54 H7
3U55 E9
3U56 B6
3U57 A6
3U58 G12
3U59 G12
3U60 F4
3U61 F5
3U62 F7
3U63 F6
3U64 F7
3U65 F5
3U66 F4
3U67 G5
3U68 G6
3U69 F6
3U70 C14
5U01 B8
5U02 A2
5U03 B7
5U04 C7
5U05 C12
5U06 D12
5U07 B8
6U01 A2
6U02 A8
6U03 A4
6U04 B5
6U05 B1
6U06 C9
6U07 D14
6U08 E3
6U09 E3
6U10 H1
6U11 H2
6U12 F9
6U13 E10
6U14 H8
6U16 F7
6U17 D14
7U01 B2
7U02 C4
7U03 C7
7U04 C5
7U05 D9
7U06-A D12
7U06-B D12
7U07-1 G10
7U07-2 F8
7U08 D5
7U09 E1
7U10 G4
7U11 E3
7U12 H3
7U13-1 F5
7U13-2 F4
FU03 B9
FU04 B9
FU05 C8
FU06 G6
FU07 H1
FU08 C9
FU09 D13
IU01 B2
IU02 C1
IU03 D1
IU04 E3
IU05 D3
IU06 D4
IU07 D4
IU08 C4
IU09 B4
IU10 A4
IU11 A5
IU13 D8
IU14 D6
IU15 A8
IU16 C11
IU17 D9
IU18 D11
IU19 C14
IU20 D10
IU21 D14
IU22 E12
IU25 H4
IU26 E2
IU27 G3
IU28 H2
IU30 C3
IU31 C2
IU32 E2
IU34 H6
IU35 G7
IU36 G9
IU37 F8
IU38 G9
IU39 G9
IU40 G10
IU41 H9
IU42 C6
IU43 E10
IU44 F11
IU45 F9
IU46 F5
IU47 F6
cU01 H12

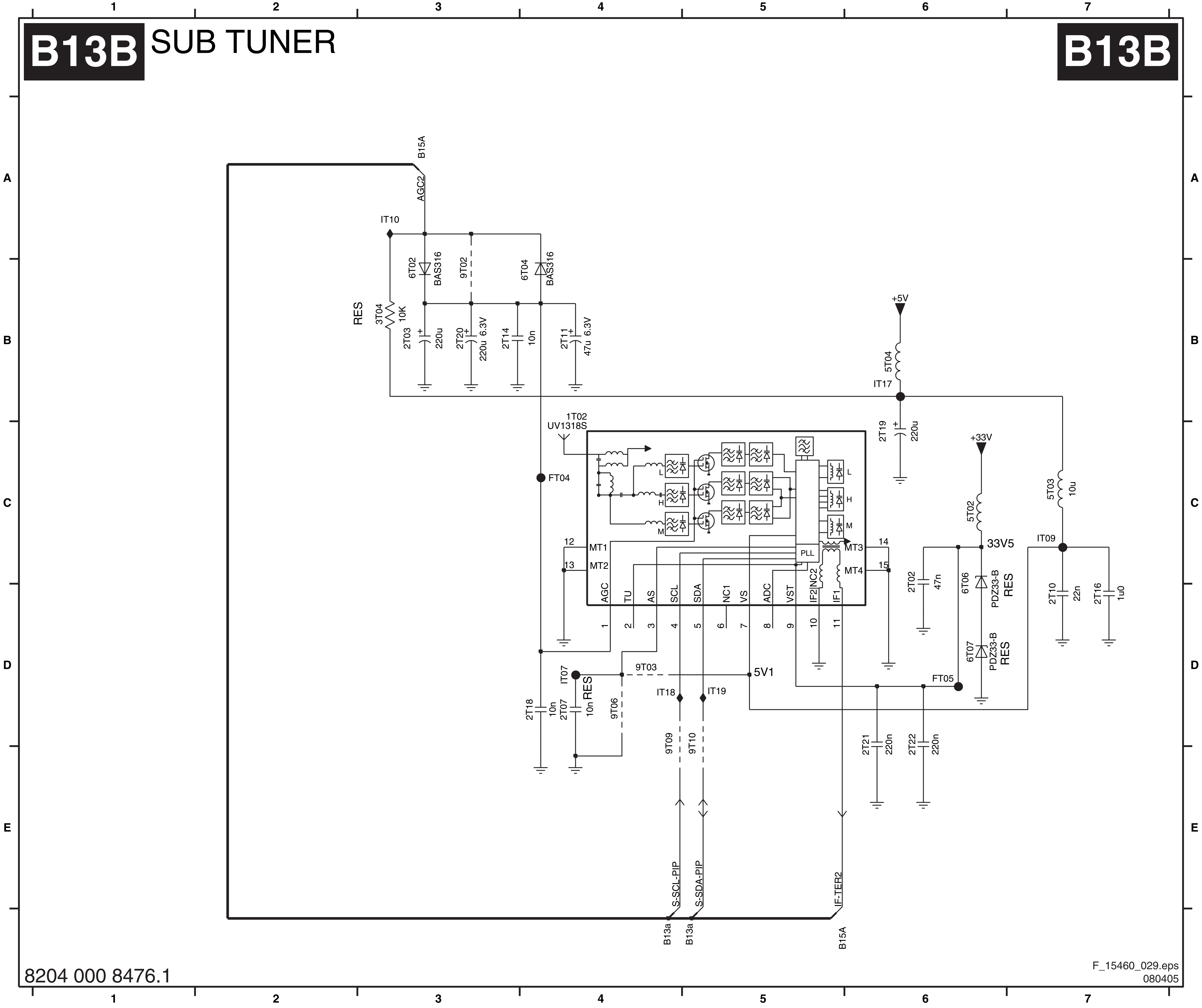

B12
DC/DC - CONVERTOR
B12
+11V
1U01
T 1500mA
420
5U02
10u
2U15
100u
6U01
BAS316
2U10
22u
2U38
220u 16V
res
GND
21V6
IU10
6U03
BAS316
3U51
22R
IU11
3U02
1K0
IU01
21V4
7U01
BC857B
6U05
BZX384-C12
2U18
120p
2U30
120p
3U31
120R
3U29
10R
3U30
120R
IU30
3U04
120R
2U16
4n7
3U03
33K
IU02
2U32
3n3
IU03
IU31
2U05
1n0
3U44
1M0
2U27
6n8
3U14
1K0
IU05
IU06
2U03
1u0
6U04
BAS316
2U14
470n
2U04
470n
IU09
2U21
470n
GND_SUPPLY
7U02
BC857B
3U05
1K0
IU08
2U06
22u
D
2U07
82p
3U09
5K6
IU07
3U11
120R
7U04
SI4410DY
2U17
470n
3U56
4K7
2U36
100n
3U57
10K
2U37
2n2
GND-ILINK
5U01
res
2U01
res
2n2
IU15
6U02
res
STPS2L30A
FU03
+3V3-ILINK
2U02
res
47u
FU04
GND-ILINK
5U03
10u
5U07
5U04
FU05
IU42
FU08
SI4410DY
7U03
2U08
22u
BZG05C3V9
6U06
3U07
22R
2U29
330u 6.3V
res
IU17
7U05
BC857BW
2U09
1n0
3U13
10K
7U08
BC817-25
IU14
3U17
4R7
IU13
3U19
4K7
2U12
10n
BC817-25
7U09
IU32
3U45
1M0
2U28
6n8
6U08
BAT54 COL
6U09
BAT54 COL
3U21
47K
IU04
3U28
47K
IU26
7U11
BC847BW
3U25
220K
IU16
3U46
47K 1%
3U08
1K5 1%
3V4
5U05
10u
3V4
+3V3_SIM
2U23
100u
IU18
3U06
470R
7U06-1
BC847BS
5U06
10u
+3V3_DCDCFBX
2U31
100u
FU09
3U16
120R
IU20
1V6
7U06-2
BC847BS
1V7
IU22
2U11
1n0
3U18
1K0 1%
3U22
270R
3U01
1K0
3U70
1K0
6V9
IU19
3U10
1R0
6U07
PDZ6.8-B
6U17
PDZ6.8-B
3U15
3K3 1%
IU21
3U20
1K0 1%
2U13
220n
3U23
1R0
3U55
1K0
PDZ6.2-B
6U13
IU43
IU45
3U53
18K
3U52
1K0
BZX384-C5V1
6U12
2U33
1u0
IU44
2U34
22n
3U12
22K
3U60
1K0
3U61
10K
IU46
2U42
47n
3U69
1K0
3U62
1K0
2U40
2n2
3U66
10K
3U65
1K0
7U13-1
BC847BPN
7U13-2
IU47
3U63
2K2
2U39
100n
3U64
1K0
2U41
6n8
BZX384-C5V1
6U16
3U67
100R
3U68
10K
3V3_FAULT
B3e,B14a,B19b,B13c
7U07-2
IU37
3U38
2K2
3U37
22K
IU38
7U07-1
BC847BPN
3U40
150K
IU40
7U10
BC847BW
IU27
3U43
22K
FU06
3U24
22K
IU35
2U24
1n0
IU36
3U39
22K
IU39
2U35
1u0
3U27
22K
3U36
2K2
IU25
3U42
10K
IU34
2U26
100n
2U22
1u0
3U41
1K0
6U14
BAV99 COL
IU41
3U54
100R
3U32
18K
FU07
6U10
BZX384-C15
IU28
0V7
7U12
BC847BW
2U19
100n
6U11
BAS316
3U33
10K
2U20
1u0
3U34
330K
3U26
22K
2U25
100n
3U35
10K
3U58
1R0
res
3U59
1R0
res
cU01
GND
GND_SUPPLY
8204 000 8480.1
F_15460_027.eps
070405
1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H

SSB: Main Tuner

1T01 B3
2T01 B2
2T04 C5
2T05 C1
2T06 E4
2T09 D5
2T12 C7
2T13 B2
2T15 D5
2T17 D2
2T60 B2
2T61 B2
2T62 D5
2T63 D5
3T03 B1
3T05 C7
3T06 D7
5T20 B1
5T22 C5
5T25 C6
6T01 B2
6T03 B2
6T05 D6
6T08 D5
7T50 C6
9T01 B2
9T04 D4
9T05 E4
9T07 E4
9T08 E4
9T12 E7
9T14 C5
9T50 E7
AT00 E5
FT50 B1
FT51 C2
FT52 D4
FT53 C6
FT54 D5
IT50 A1
IT51 D4
IT52 D4
IT53 C7
IT54 D7

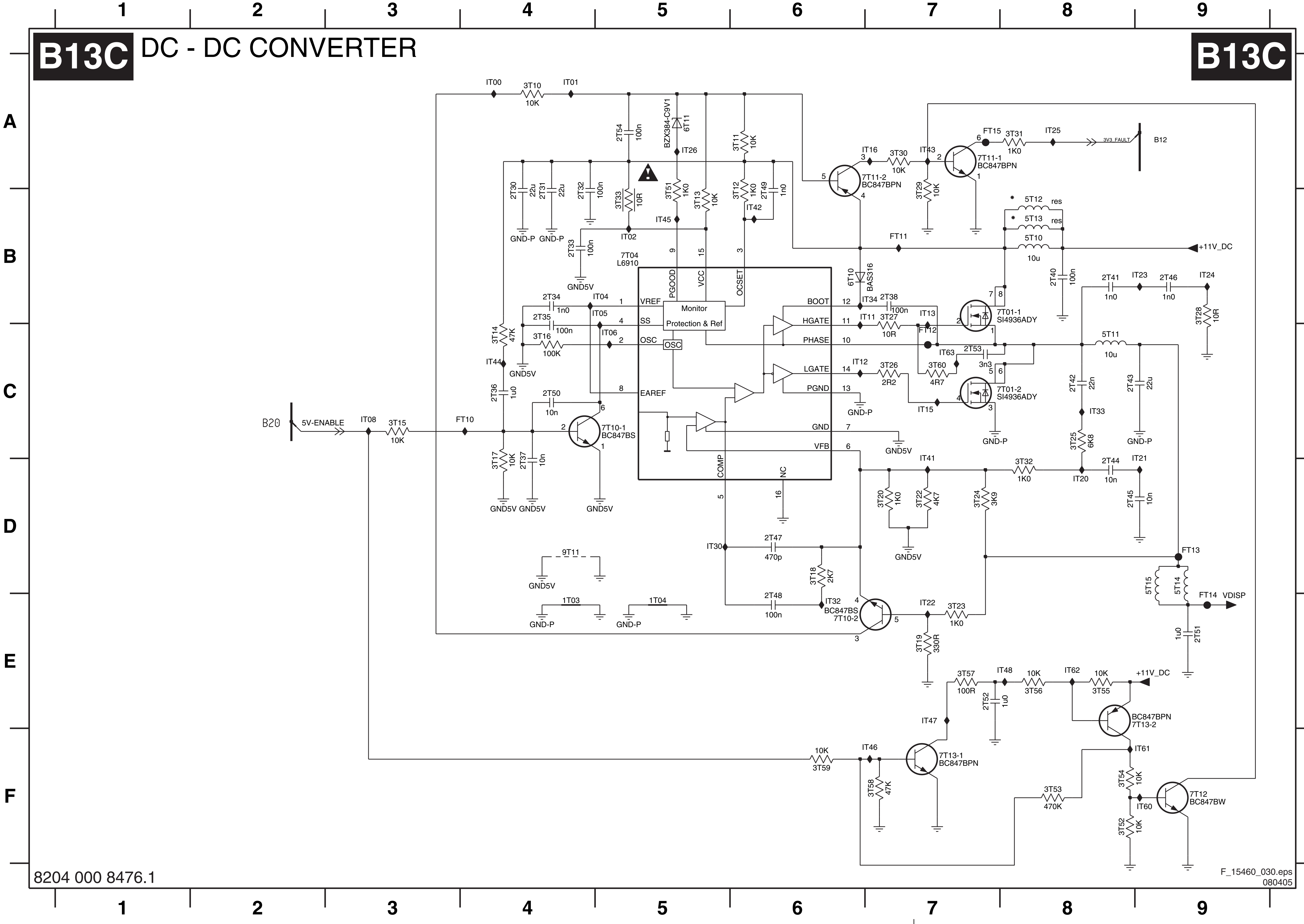

B13A
MAIN TUNER
B13A
1
2
3
4
5
6
7
A
B
C
D
E
B2
AGC
IT50
6T01
BAS316
9T01
6T03
BAS316
+5V
3T03
RES
2T01
220u
2T60
220u 6.3V
2T13
10n
2T61
47u 6.3V
5T20
FT50
2T05
220u
RES
FT51
1T01
UV1318ST/AIH-MK3
RF IN
RF OUT
PRE-FIL
BOOSTER SPLITTER
PRE-FIL
TRACK FILTER
GAIN CTRL PRE-AMP
TRACK FILTER
INTMED FILTER
MIX-OSC
IF AMP
AGC DET
PLL
IFOUT
MT
MT
AGC
TU
NC1
NC2
33V
5V
AS
SCL
SDA
ADC
0V5
+33V
5T22
5T25
10u
FT53
2T04
47n
9T14
6T08
PDZ33-B
SML4752-33V
6T05
FT54
7T50
P82B96TD
RES
VCC
SX
TX
RX
SY
TY
RY
GND
3T05
10K
RES
2T12
100n
IT53
3T06
10K
RES
IT54
9T04
FT52
IT52
IT51
2T17
10n
2T62
220n
2T63
220n
2T09
22n
2T15
1u0
9T05
10n
2T06
9T07
9T08
9T50
9T12
AT00
IF-TER
SDA-S
SCL-S
S-SCL-PIP
S-SDA-PIP
B2
B13b
B13b
8204 000 8479.1
F_15460_028.eps
080405

SSB: Sub Tuner


B13B SUB TUNER
B13B
B15A
AGC2
IT10
6T02
BAS316
9T02
6T04
BAS316
RES
3T04
10K
2T03
220u
2T20
220u 6.3V
2T14
10n
2T11
47u 6.3V
+5V
5T04
IT17
2T19
220u
1T02
UV1318S
FT04
+33V
5T03
10u
5T02
33V5
IT09
12
MT1
13
MT2
MT3
14
MT4
15
PLL
L
H
M
AGC
TU
AS
SCL
SDA
NC1
VS
ADC
VST
IF2
NC2
IF1
1
2
3
4
5
6
7
8
9
10
11
2T02
47n
6T06
PDZ33-B
RES
6T07
PDZ33-B
RES
2T10
22n
2T16
1u0
IT07
9T03
5V1
FT05
IT18
IT19
RES
2T18
10n
2T07
10n
9T06
9T09
9T10
2T21
220n
2T22
220n
S-SCL-PIP
S-SDA-PIP
IF-TER2
B13a
B13a
B15A
8204 000 8476.1
F_15460_029.eps
080405
1
2
3
4
5
6
7
A
B
C
D
E

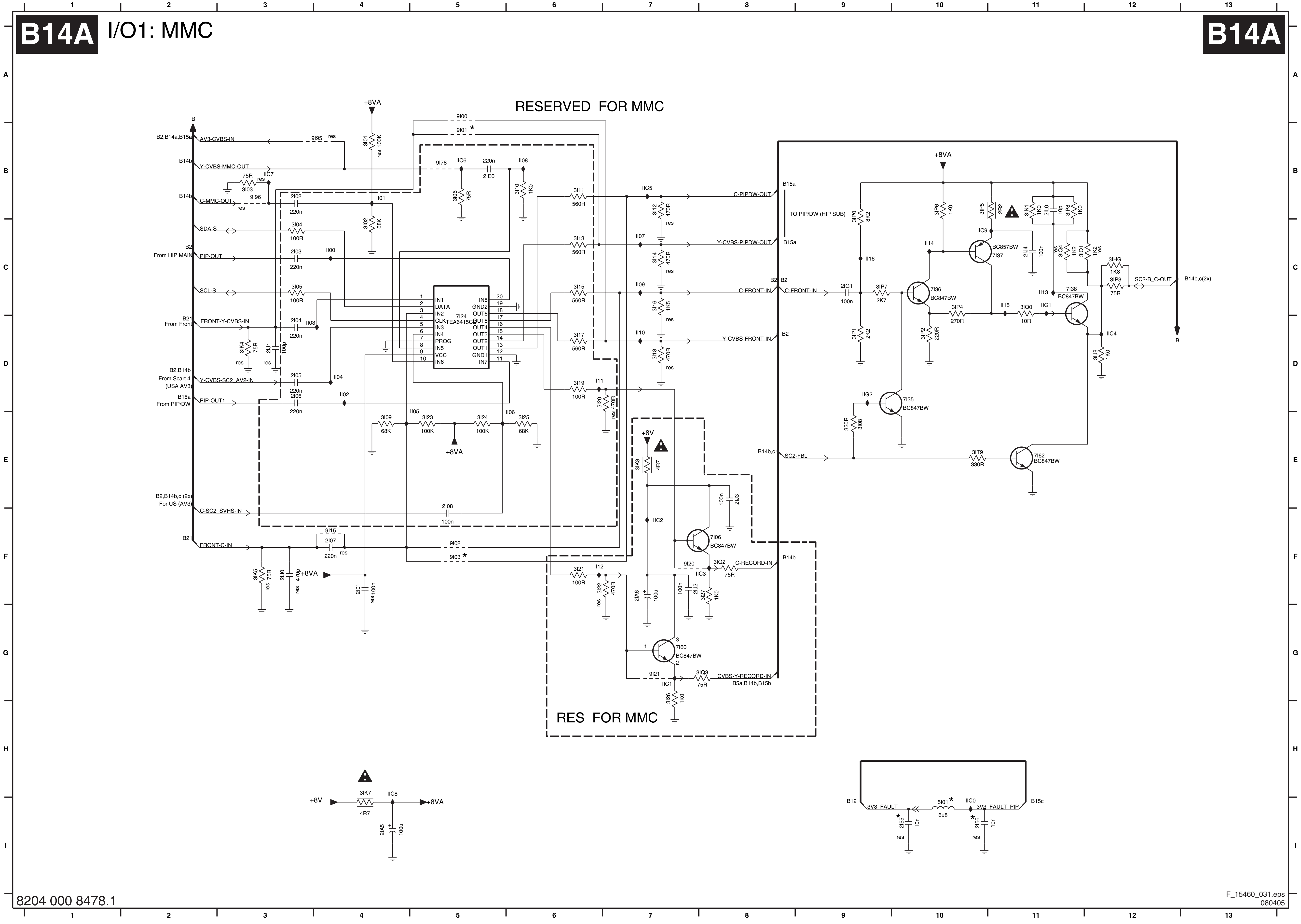
1T02	B4
2T02	C6
2T03	B3
2T07	D4
2T10	D7
2T11	B4
2T14	B3
2T16	D7
2T18	D4
2T19	C6
2T20	B3
2T21	D6
2T22	D6
3T04	B3
5T02	C6
5T03	C7
5T04	B6
6T02	B3
6T04	B4
6T06	C6
6T07	D6
9T02	B3
9T03	D4
9T06	D4
9T09	D4
9T10	D5
FT04	C4
FT05	D6
IT07	D4
IT09	C7
IT10	A3
IT17	B6
IT18	D4
IT19	D5

SSB: DC/DC Converter


1 2 3 4 5 6 7 8 9
A B C D E F
B13C
DC - DC CONVERTER
B13C
IT00
3T10
10K
IT01
2T54
100n
BZX384-C9V1
6T11
IT26
3T11
10K
2T30
22u
2T31
22u
2T32
100n
3T33
10R
3T51
1K0
3T13
10K
3T12
1K0
2T49
1n0
IT42
IT45
IT02
GND-P
GND-P
2T33
100n
GND5V
7T04
L6910
9
15
3
PGOOD
VCC
OCSET
2T34
1n0
IT04
IT05
2T35
100n
IT06
3T16
100K
3T14
47K
IT44
GND5V
1 VREF
4 SS
2 OSC
8 EAREF
Monitor
Protection & Ref
OSC
BOOT 12
HGATE 11
PHASE 10
LGATE 14
PGND 13
GND 7
VFB 6
COMP
NC
5
16
2T36
1u0
2T50
10n
7T10-1
BC847BS
B20
5V-ENABLE
IT08
3T15
10K
FT10
3T17
10K
2T37
10n
GND5V GND5V GND5V
IT16
3T30
10K
IT43
7T11-1
BC847BPN
FT15
3T31
1K0
IT25
3V3_FAULT
B12
7T11-2
BC847BPN
3T29
10K
5T12 res
5T13 res
5T10
10u
FT11
+11V_DC
6T10
BAS316
IT34
2T38
100n
IT11
3T27
10R
IT13
FT12
7T01-1
SI4936ADY
2T40
100n
2T41
1n0
IT23
2T46
1n0
IT24
3T28
10R
IT63
2T53
3n3
3T60
4R7
5T11
10u
IT12
3T26
2R2
7T01-2
SI4936ADY
GND-P
IT15
GND-P
2T42
22n
2T43
22u
IT33
3T25
6K8
GND-P
GND5V
IT41
3T32
1K0
IT20
2T44
10n
IT21
2T45
10n
3T20
1K0
3T22
4K7
3T24
3K9
GND5V
FT13
9T11
GND5V
IT30
2T47
470p
3T18
2K7
1T03
1T04
GND-P
GND-P
2T48
100n
IT32
BC847BS
7T10-2
IT22
3T23
1K0
5T15
5T14
FT14 VDISP
1u0
2T51
3T19
330R
3T57
100R
IT48
10K
3T56
IT62
10K
3T55
+11V_DC
2T52
1u0
IT47
BC847BPN
7T13-2
IT46
10K
3T59
7T13-1
BC847BPN
3T58
47K
IT61
3T54
10K
3T53
470K
IT60
7T12
BC847BW
3T52
10K
8204 000 8476.1
F_15460_030.eps
080405

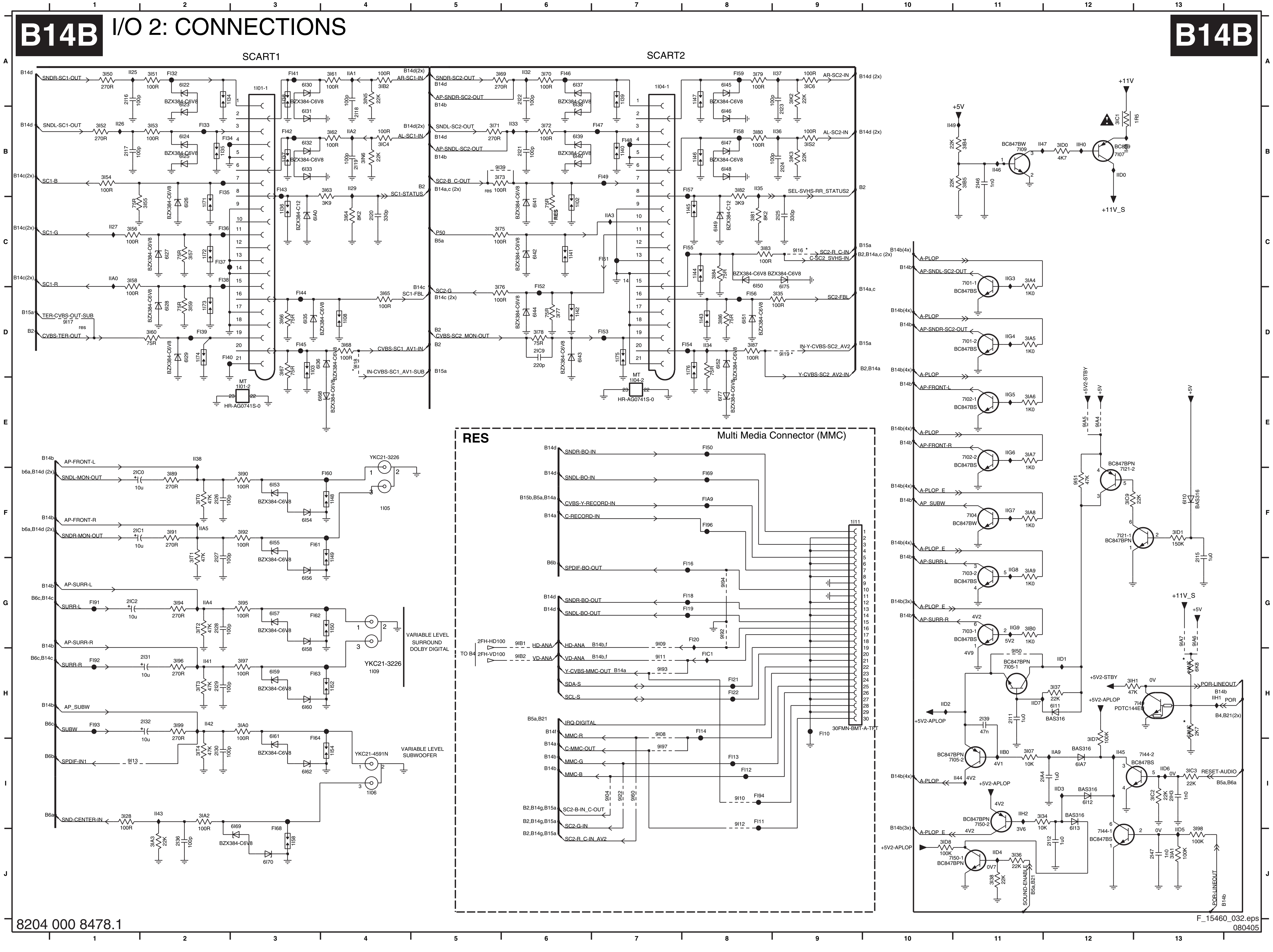
1T03	E4
1T04	E5
2T30	B4
2T31	B4
2T32	B4
2T33	B4
2T34	B4
2T35	B4
2T36	C4
2T37	D4
2T38	B7
2T40	B8
2T41	B8
2T42	C8
2T43	C8
2T44	D8
2T45	D8
2T46	B9
2T47	D6
2T48	E6
2T49	B6
2T50	C4
2T51	E9
2T52	E7
2T53	C7
2T54	A5
3T10	A4
3T11	A6
3T12	B6
3T13	B5
3T14	C4
3T15	C3
3T16	C4
3T17	D4
3T18	D6
3T19	E7
3T20	D7
3T22	D7
3T23	E7
3T24	D7
3T25	C8
3T26	C7
3T27	B7
3T28	B9
3T29	B7
3T30	A7
3T31	A8
3T32	D8
3T33	B5
3T51	B5
3T52	F8
3T53	F8
3T54	F8
3T55	E8
3T56	E8
3T57	E7
3T58	F7
3T59	F6
3T60	C7
5T10	B8
5T11	C8
5T12	B8
5T13	B8
5T14	D9
5T15	D9
6T10	B6
6T11	A5
7T01-1	B7
7T01-2	C7
7T04	B5
7T10-1	C5
7T10-2	E6
7T11-1	A7
7T11-2	A6
7T12	F9
7T13-1	F7
7T13-2	E8
9T11	D4
FT10	C4
FT11	B7
FT12	C7
FT13	D9
FT14	E9
FT15	A7
IT00	A4
IT01	A4
IT02	B5
IT04	B5
IT05	B5
IT06	C5
IT08	C3
IT11	B7
IT12	C6
IT13	B7
IT15	C7
IT16	A7
IT20	D8
IT21	C9
IT22	E7
IT23	B9
IT24	B9
IT25	A8
IT26	A5
IT30	D5
IT32	E6
IT33	C8
IT34	B7
IT41	C7
IT42	B6
IT43	A7
IT44	C4
IT45	B5
IT46	F7
IT47	E7
IT48	E7
IT60	F9
IT61	F9
IT62	E8
IT63	C7

SSB: I/O1: MMC


B14A
I/O1: MMC
RESERVED FOR MMC
RES FOR MMC
+8VA
+8V
B2,B14a,B15a AV3-CVBS-IN
B14b Y-CVBS-MMC-OUT
B14b C-MMC-OUT
SDA-S
B2 From HIP MAIN PIP-OUT
SCL-S
B21 From Front FRONT-Y-CVBS-IN
B2,B14b From Scart 4 (USA AV3) Y-CVBS-SC2_AV2-IN
B15a From PIP/DW PIP-OUT1
B2,B14b,c (2x) For US (AV3) C-SC2_SVHS-IN
B21 FRONT-C-IN
7I24 TEA6415CD
IN1 DATA IN2 CLK IN3 IN4 PROG IN5 VCC IN6
IN8 GND2 OUT6 OUT5 OUT4 OUT3 OUT2 OUT1 GND1 IN7
C-PIPDW-OUT
Y-CVBS-PIPDW-OUT
C-FRONT-IN
Y-CVBS-FRONT-IN
B15a
TO PIP/DW (HIP SUB)
B2
SC2-B_C-OUT
B14b,c(2x)
SC2-FBL
B14b,c
C-RECORD-IN
B14b
CVBS-Y-RECORD-IN
B5a,B14b,B15b
7I06 BC847BW
7I60 BC847BW
7I35 BC847BW
7I36 BC847BW
7I37 BC857BW
7I38 BC847BW
7I62 BC847BW
3IK7 4R7 IIC8
2IA5 100u
B12 3V3_FAULT
5I01 6u8
IIC0
3V3_FAULT_PIP B15c
2I55 10n res
2I56 10n res
8204 000 8478.1
F_15460_031.eps
080405

2I01	F4
2I02	B3
2I03	C3
2I04	D3
2I05	D3
2I06	D3
2I07	F4
2I08	E5
2I55	I10
2I56	I10
2IA5	I4
2IA6	F7
2IE0	B5
2IG1	C9
2IJ0	F3
2IJ1	D3
2IJ2	F7
2IJ3	E8
2IJ4	C11
2IL0	B11
3I01	B4
3I02	C4
3I03	B3
3I04	C3
3I05	C3
3I06	B5
3I08	E9
3I09	E4
3I10	B6
3I11	B6
3I12	B7
3I13	C6
3I14	C7
3I15	C6
3I16	C7
3I17	D6
3I18	D7
3I19	D6
3I20	D6
3I21	F6
3I22	F6
3I23	E5
3I24	E5
3I25	E6
3I26	G7
3I27	F8
3IHG	C12
3IJ8	D12
3IK4	D3
3IK5	F3
3IK7	H4
3IK8	E7
3IN1	B11
3IP0	B9
3IP1	D9
3IP2	D10
3IP3	C12
3IP4	C10
3IP5	B10
3IP6	B10
3IP7	C9
3IP8	B11
3IQ0	C11
3IQ1	C11
3IQ2	F8
3IQ3	G8
3IQ4	C11
3IT9	E10
5I01	I10
7I06	F8
7I24	C1
7I24	D5
7I35	D10
7I36	C10
7I37	C11
7I38	C11
7I60	G7
7I62	E11
9I00	A5
9I01	B5
9I02	F5
9I03	F5
9I15	F4
9I20	F7
9I21	G7
9I78	B5
9I95	B4
9I96	B3
II00	C4
II01	B4
II02	D4
II03	D3
II04	D4
II05	D5
II06	E6
II07	C7
II08	B6
II09	C7
II10	D7
II11	D6
II12	F6
II13	C11
II14	C10
II15	C11
II16	C9
IIC0	I10
IIC1	G7
IIC2	F7
IIC3	F8
IIC4	D12
IIC5	B7
IIC6	B5
IIC7	B3
IIC8	H4
IIC9	C10
IIG1	C11
IIG2	D9

SSB: I/O2: Connections



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1I02 C6
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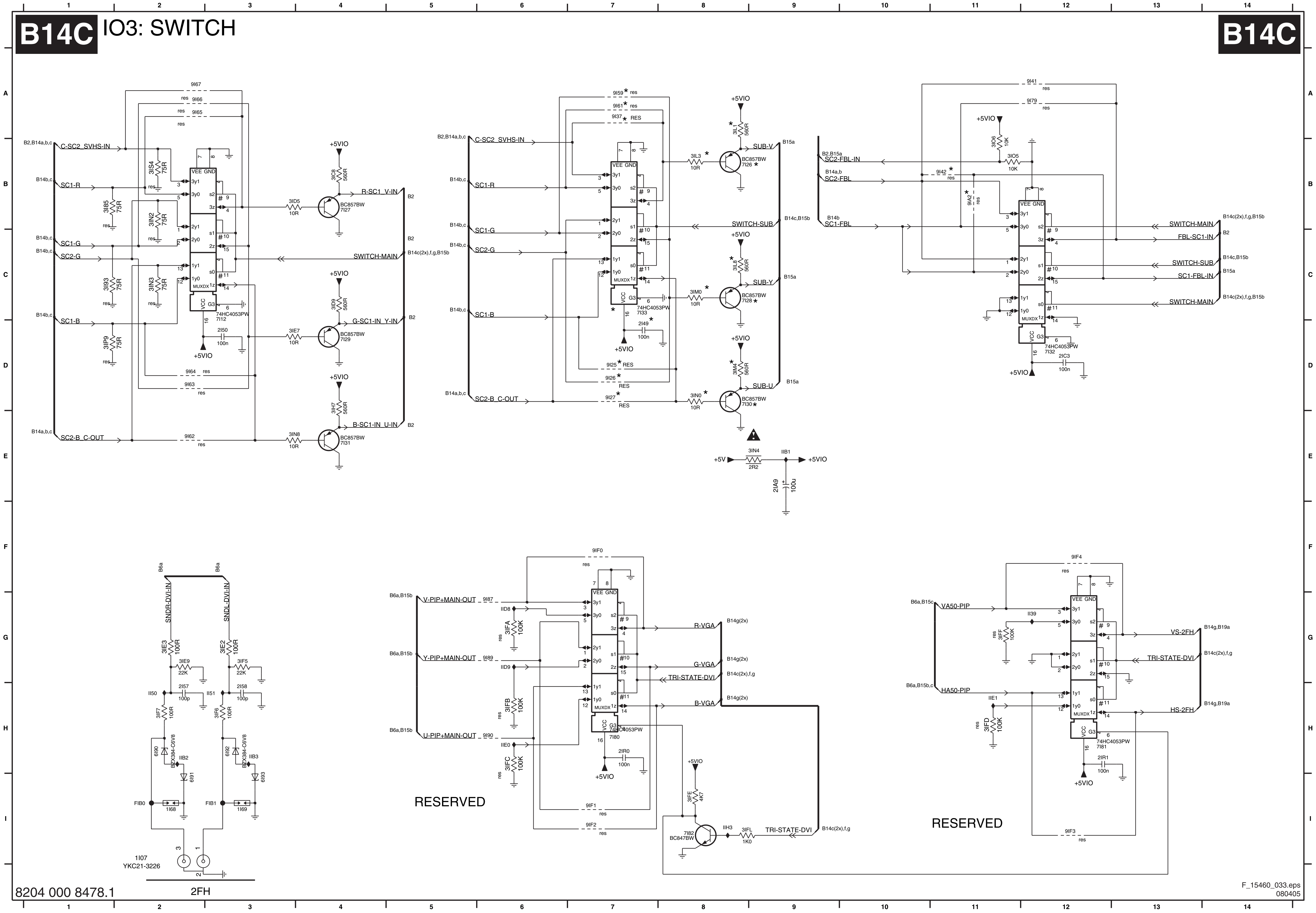
1I04-2 E7
1I05 F4
1I06 I4
1I08 D4
1I09 H4
1I11 F9
1I34 A2
1I35 B2
1I36 C3
1I37 B3
1I38 A3
1I39 A7
1I40 B7
1I41 C6
1I42 D6
1I43 D8
1I44 C8
1I45 C8
1I46 B8
1I47 A8
1I48 F4
1I49 F4
1I50 G4
1I52 H4
1I54 I4
1I58 J3
1I71 C2
1I72 C2
1I73 D2
1I74 D2
1I75 D7
1I76 D8
2I11 H11
2I12 J12
2I15 F13
2I16 A1
2I17 B1
2I18 B4
2I19 B4
2I20 C4
2I21 B6
2I22 A6
2I23 B9
2I24 B9
2I25 C9
2I26 F2
2I27 F2
2I28 G2
2I29 H2
2I30 I2
2I31 H2
2I32 H2
2I36 J2
2I39 H11
2I46 B11
2I47 J13
2IA4 I12
2IC0 F1
2IC1 F1
2IC2 G1
2IC9 D6
2IH3 I13
3I07 I11
3I28 I1
3I34 I11
3I35 D9
3I36 J11
3I37 H12
3I38 J11
3I50 A1
3I51 A2
3I52 B1
3I53 B2
3I54 B1
3I55 C2
3I56 C1
3I57 C2
3I58 C1
3I59 D2
3I60 D2
3I61 A4
3I62 B4
3I63 B4
3I64 C4
3I65 D4
3I66 D3
3I67 D3
3I68 D4
3I69 A5
3I70 A6
3I71 B5
3I72 B6
3I73 B5
3I75 C5
3I76 D5
3I77 D6
3I78 D6
3I79 A8
3I80 B8
3I81 C8
3I82 B8
3I83 C8
3I84 C8
3I86 D8
3I87 D8
3I89 F2
3I90 F3
3I91 F2
3I92 F3
3I94 G2
3I95 G3
3I96 H2
3I97 H3
3I98 J13
3I99 H2
3IA0 H3
3IA1 J13
3IA2 I2
3IA3 J2
3IA4 C11
3IA5 D11
3IA6 E11
3IA7 E11
3IA8 F11
3IA9 G11
3IB0 G11
3IB2 A4
3IB4 B11
3IB5 B11
3IC1 B12
3IC2 I13
3IC3 I13
3IC4 B4
3IC6 A9
3IC9 F12
3ID0 B12
3ID1 F13
3ID7 H12
3ID8 J10
3IH1 H12
3IK2 A9
3IK3 B9
3IN5 A4
3IN6 B4
3IS2 B9
3IT0 F2
3IT1 F2
3IT2 G2
3IT3 H2
3IT4 I2
3IW4 H13
3IW5 H13
6I10 F13
6I11 H12
6I12 I12
6I13 I12
6I22 A2
6I23 A2
6I24 B2
6I25 B2
6I26 C2
6I27 C2
6I28 D2
6I29 D2
6I30 A3
6I31 B3
6I32 B3
6I33 B3
6I35 D3
6I36 D3
6I37 A6
6I38 A6
6I39 B6
6I40 B6
6I41 C6
6I42 C6
6I43 D6
6I44 D6
6I45 A8
6I46 B8
6I47 B8
6I48 B8
6I49 C8
6I50 C8
6I51 D8
6I52 D8
6I53 F3
6I54 F3
6I55 F3
6I56 G3
6I57 G3
6I58 H3
6I59 H3
6I60 H3
6I61 H3
6I62 I3
6I68 E4
6I69 I3
6I70 J3
6I75 C9
6I77 E8
6IA0 C3
6IA7 I12
7I01-1 C11
7I01-2 D11
7I02-1 E11
7I02-2 E11
7I03-1 G11
7I03-2 G11
7I04 F11
7I05-1 H11
7I05-2 I11
7I07 B12
7I09 B11
7I21-1 F12
7I21-2 E13
7I44-1 J12
7I44-2 I13
7I49 H13
7I50-1 J11
7I50-2 I11
9I04 I7
9I08 H7
9I09 G7
9I10 I8
9I11 H7
9I12 I8
9I13 I1
9I16 C9
9I17 D1
9I18 D4
9I19 D9
9I22 I7
9I39 B5
9I50 H11
9I51 F12
9I60 I7
9I92 G8
9I93 H7
9I94 G8
9I97 I7
9IA4 E12
9IA5 E12
9IA6 G13
9IA7 G13
9IB1 G6
9IB2 H6
FI10 H9
FI11 I8
FI12 I8
FI13 I8
FI14 H8
FI16 G8
FI18 G8
FI19 G8
FI20 G8
FI21 H8
FI22 H8
FI32 A2
FI33 B2
FI34 B2
FI35 B2
FI36 C2
FI37 C2
FI38 C2
FI39 D2
FI40 D2
FI41 A3
FI42 B3
FI43 B3
FI44 D3
FI45 D3
FI46 A6
FI47 B7
FI48 B7
FI49 B7
FI50 E8
FI51 C7
FI52 D6
FI53 D7
FI54 D8
FI55 C8
FI56 D8
FI57 B8
FI58 B8
FI59 A8
FI60 F4
FI61 F3
FI62 G3
FI63 H3
FI64 I3
FI68 J3
FI69 F8
FI91 G1
FI92 H1
FI93 H1
FI94 I8
FI96 F8
FIA9 F8
FIC1 H8
II25 A1
II26 B1
II27 C1
II29 B4
II32 A6
II33 B6
II34 D8
II35 B8
II36 B9
II37 A9
II38 E2
II41 H2
II42 H2
II43 I2
II44 I11
II45 I12
II46 B11
II47 B11
II48 B12
II49 B10
IIA0 C1
IIA1 A4
IIA2 B4
IIA3 C7
IIA4 G2
IIA5 F2
IIA9 I12
IIB0 I11
IID0 B12
IID1 H12
IID2 H10
IID3 I12
IID4 J11
IID5 J13
IID6 I13
IID7 H11
IIG3 C11
IIG4 D11
IIG5 E11
IIG6 E11
IIG7 F11
IIG8 G11
IIG9 G11
IIH0 B12
IIH1 H13
IIH2 I11

SSB: I/O3: Switch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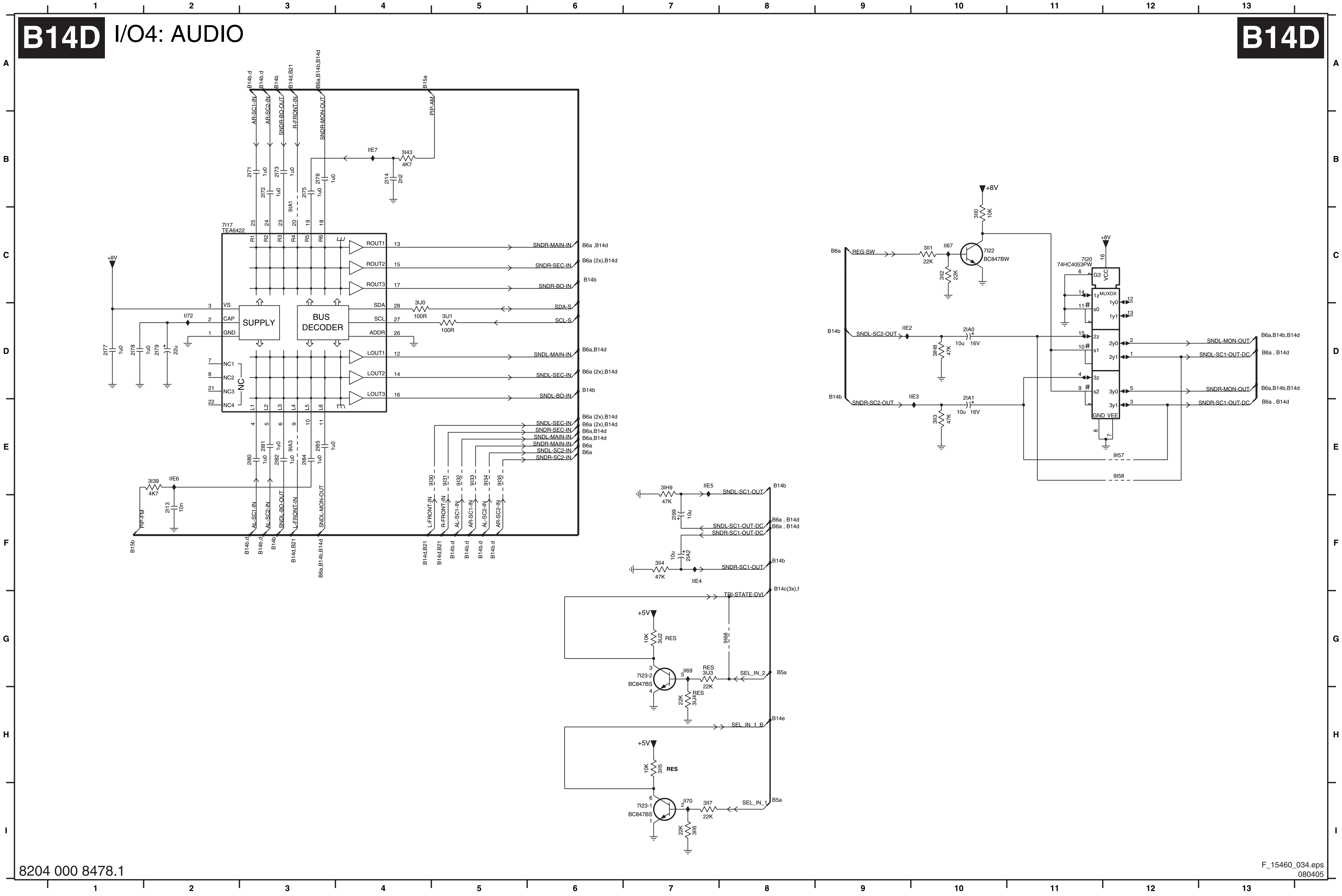
IO3: SWITCH
B14C
C-SC2_SVHS-IN
SC1-R
SC1-G
SC2-G
SC1-B
SC2-B_C-OUT
R-SC1_V-IN
G-SC1-IN_Y-IN
B-SC1-IN_U-IN
SWITCH-MAIN
SWITCH-SUB
SUB-V
SUB-Y
SUB-U
SC2-FBL-IN
SC2-FBL
SC1-FBL
FBL-SC1-IN
SC1-FBL-IN
74HC4053PW
BC857BW
+5VIO
+5V
3IN4 2R2
2IA9 100u
SNDR-DVI-IN
SNDL-DVI-IN
1I07 YKC21-3226
2FH
V-PIP+MAIN-OUT
Y-PIP+MAIN-OUT
U-PIP+MAIN-OUT
R-VGA
G-VGA
B-VGA
TRI-STATE-DVI
7I80
7I82 BC847BW
VA50-PIP
HA50-PIP
VS-2FH
HS-2FH
7I81
RESERVED
RESERVED
8204 000 8478.1
F_15460_033.eps
080405

1I07	I2
1I68	I2
1I69	I3
2I49	D7
2I50	D3
2I57	H2
2I58	H3
2IA9	E9
2IC3	D12
2IR0	H7
2IR1	H12
3I85	B1
3I93	C1
3IC8	B4
3ID5	B3
3ID9	C4
3IE2	G3
3IE3	G2
3IE7	D3
3IE9	G2
3IF5	G3
3IF6	H3
3IF7	H2
3IFA	G6
3IFB	H6
3IFC	H6
3IFD	H11
3IFE	I8
3IFF	G11
3IFL	I8
3IH7	D4
3IL1	A8
3IL3	B8
3IL8	C8
3IM0	C8
3IM4	D8
3IN0	D8
3IN2	B2
3IN3	C2
3IN4	E9
3IN8	E3
3IO5	B11
3IO6	B11
3IP9	D1
3IS4	B2
6I90	H2
6I91	I2
6I92	H3
6I93	I3
7I12	D3
7I26	B8
7I27	B4
7I28	C8
7I29	D4
7I30	D8
7I31	E4
7I32	D12
7I33	C7
7I80	H7
7I81	H12
7I82	I8
9I25	D7
9I26	D7
9I27	D7
9I37	A7
9I41	A12
9I42	B11
9I59	A7
9I61	A7
9I62	E2
9I63	D2
9I64	D2
9I65	A2
9I66	A2
9I67	A2
9I79	A12
9I87	G6
9I89	G6
9I90	H6
9IA2	B11
9IF0	F7
9IF1	I7
9IF2	I7
9IF3	I12
9IF4	F12
FIB0	I2
FIB1	I3
II39	G12
II50	H2
II51	H3
IIB1	E9
IIB2	H2
IIB3	H3
IID8	G6
IID9	G6
IIE0	H6
IIE1	H11
IIH3	I8

SSB: I/O4: Audio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I/O4: AUDIO
B14D
7I17
TEA6422
SUPPLY
BUS DECODER
NC
VS
CAP
GND
NC1
NC2
NC3
NC4
ROUT1
ROUT2
ROUT3
SDA
SCL
ADDR
LOUT1
LOUT2
LOUT3
AR-SC1-IN
AR-SC2-IN
SNDR-BO-OUT
R-FRONT-IN
SNDR-MON-OUT
PIP-AM
AL-SC1-IN
AL-SC2-IN
SNDL-BO-OUT
L-FRONT-IN
SNDL-MON-OUT
PIP-FM
SNDR-MAIN-IN
SNDR-SEC-IN
SNDR-BO-IN
SDA-S
SCL-S
SNDL-MAIN-IN
SNDL-SEC-IN
SNDL-BO-IN
SNDL-SC2-IN
SNDR-SC2-IN
3I43
4K7
3I39
4K7
3IJ0
100R
3IJ1
100R
+8V
7I22
BC847BW
7I20
74HC4053PW
MUXDX
REG-SW
SNDL-SC2-OUT
SNDR-SC2-OUT
SNDL-MON-OUT
SNDL-SC1-OUT-DC
SNDR-MON-OUT
SNDR-SC1-OUT-DC
SNDL-SC1-OUT
SNDR-SC1-OUT
TBI-STATE-DVI
SEL_IN_2
SEL_IN_1_B
SEL_IN_1
+5V
RES
7I23-2
BC847BS
7I23-1
BC847BS
9I57
9I58
8204 000 8478.1
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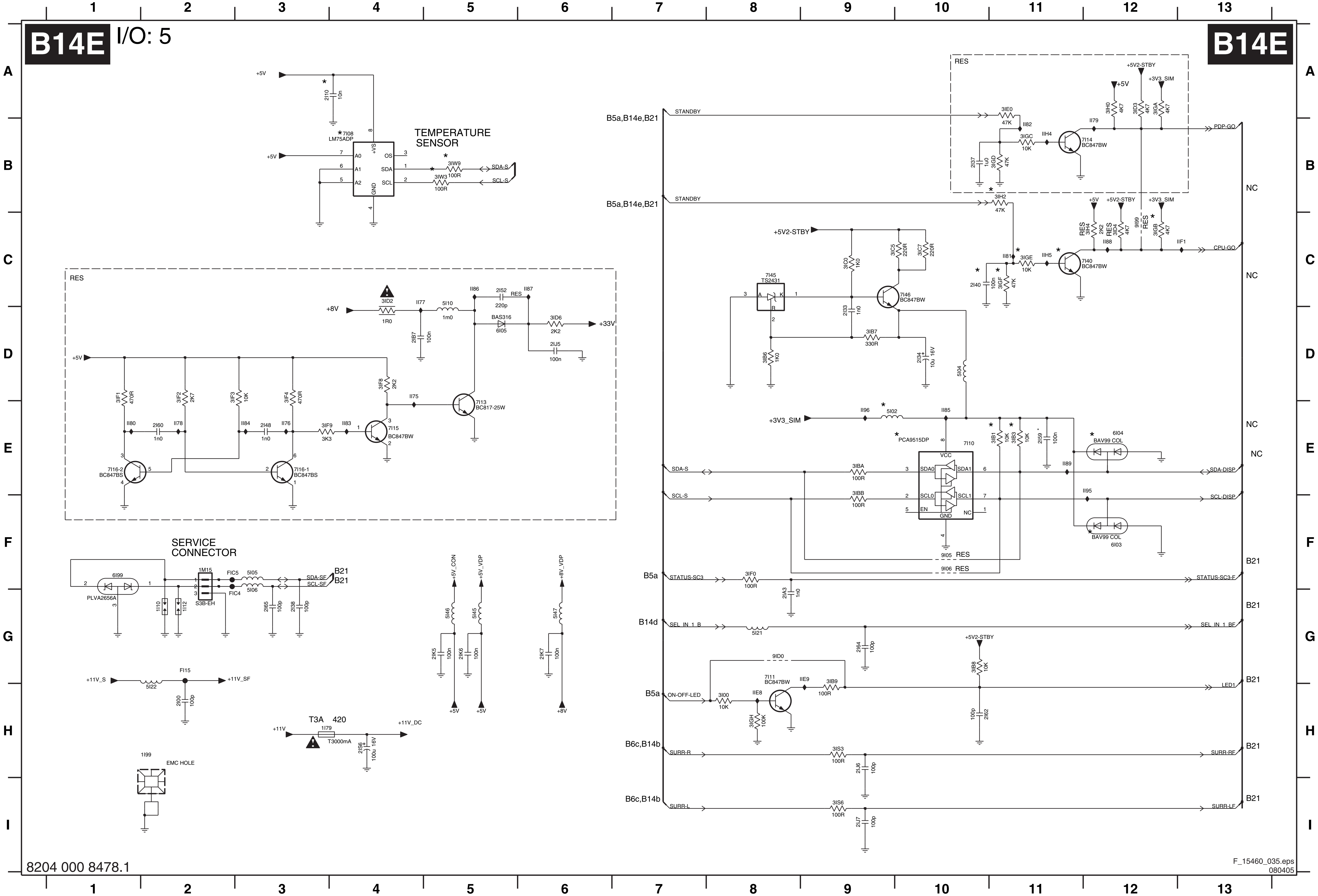
080405

2I13	F2
2I14	B4
2I71	B3
2I72	B3
2I73	B3
2I75	B3
2I76	B3
2I77	D1
2I78	D1
2I79	D2
2I80	E3
2I81	E3
2I82	E3
2I84	E3
2I85	E3
2I99	F7
2IA0	D10
2IA1	E10
2IA2	F7
3I39	E2
3I43	B4
3IH8	D10
3IH9	E7
3II0	C10
3II1	C10
3II2	C10
3II3	E10
3II4	F7
3II5	H7
3II6	I7
3II7	I7
3IJ0	D4
3IJ1	D5
3IJ2	G7
3IJ3	G7
3IJ4	H7
7I17	C2
7I20	C12
7I22	C10
7I23-1	I7
7I23-2	G7
9I30	E5
9I31	E5
9I32	E5
9I33	E5
9I34	E5
9I35	E5
9I57	E12
9I58	E12
9I68	G8
9IA1	B3
9IA3	E3
II67	C10
II69	G7
II70	I7
II72	D2
IIE2	D9
IIE3	D10
IIE4	F7
IIE5	E7
IIE6	E2
IIE7	B4

SSB: I/O: 5

1I10 G2	2I00 H2	2I38 G3	2I60 E2	2IB7 D4	2IK6 G5	3IB3 E11	3IBA E9	3ID2 C4	3IF0 F8	3IF8 D4	3IGD B11	3IH2 B11	3IW9 B5	5I10 C5	5I47 G6	7I08 B4	7I15 E4	7I46 C10	FI15 G2	II77 C4	II82 B11	II87 C6	IIE8 H8
1I12 G2	2I10 A3	2I40 C10	2I62 H10	2IJ5 D6	2IK7 G6	3IB6 D8	3IBB E9	3ID3 A12	3IF1 D1	3IF9 E3	3IGE C11	3IH4 C12	5I02 E9	5I21 G8	6I03 F12	7I10 E10	7I16-1 E3	9I05 F10	FIC4 G2	II78 E2	II83 E4	II88 C12	IIE9 G9
1I79 H3	2I33 D9	2I48 E3	2I64 G9	2IJ6 H9	2IS6 H4	3IB7 D9	3IC0 C9	3ID4 C12	3IF2 D2	3IGA A12	3IGF C11	3IS3 H9	5I04 D10	5I22 H2	6I04 E12	7I11 G8	7I16-2 E1	9I06 F10	FIC5 F2	II79 B12	II84 E3	II89 E11	IIF1 C13
1I99 H2	2I34 D10	2I52 C5	2I65 G3	2IJ7 I9	3I00 H8	3IB8 G10	3IC5 C9	3ID6 D6	3IF3 D2	3IGB C12	3IGH H8	3IS6 I9	5I05 F3	5I45 G5	6I05 D5	7I13 E5	7I40 C11	9I99 C12	II75 D4	II80 E1	II85 E10	II95 E12	IIH4 B11
1M15 F2	2I37 B10	2I59 E11	2IA3 G8	2IK5 G5	3IB1 E11	3IB9 G9	3IC7 C10	3IE0 A11	3IF4 D3	3IGC B11	3IH0 A12	3IW3 B5	5I06 G3	5I46 G5	6I99 F1	7I14 B11	7I45 C8	9ID0 G8	II76 E3	II81 C11	II86 C5	II96 E9	IIH5 C11



B14E
I/O: 5
B14E
TEMPERATURE SENSOR
7I08 LM75ADP
+5V
A0
A1
A2
OS
SDA
SCL
+VS
GND
3IW9 100R
3IW3 100R
SDA-S
SCL-S
2I10 10n
RES
+8V
3ID2 1R0
II77
5I10 1m0
II86
2I52 220p
II87
BAS316
6I05
3ID6 2K2
+33V
2IB7 100n
2IJ5 100n
+5V
3IF1 470R
3IF2 2K7
3IF3 10K
3IF4 470R
3IF8 2K2
II75
7I13 BC817-25W
II80
2I60 1n0
II78
II84
2I48 1n0
II76
3IF9 3K3
II83
7I15 BC847BW
7I16-2 BC847BS
7I16-1 BC847BS
SERVICE CONNECTOR
6I99
PLVA2656A
1I10
1I12
1M15
S3B-EH
FIC5
FIC4
5I05
5I06
2I65 100p
2I38 100p
SDA-SF
SCL-SF
B21
B21
+11V_S
5I22
FI15
+11V_SF
2I00 100p
T3A 420
+11V
1I79
T3000mA
+11V_DC
2IS6 100u 16V
1I99
EMC HOLE
+5V_CON
+5V_VDP
+8V_VDP
5I46
5I45
5I47
2IK5 100n
2IK6 100n
2IK7 100n
+5V
+5V
+8V
B5a,B14e,B21
STANDBY
B5a,B14e,B21
STANDBY
RES
+5V2-STBY
+5V
+3V3_SIM
3IE0 47K
II82
3IGC 10K
IIH4
7I14 BC847BW
II79
3IH0 4K7
3ID3 4K7
3IGA 4K7
PDP-GO
2I37 1u0
3IGD 47K
3IH2 47K
+5V
+5V2-STBY
+3V3_SIM
3IH4 2K2
3ID4 4K7
9I99
3IGB 4K7
II88
IIF1
CPU-GO
II81
3IGE 10K
IIH5
7I40 BC847BW
2I40 100n
3IGF 47K
+5V2-STBY
7I45 TS2431
3IC0 1K0
3IC5 220R
3IC7 220R
7I46 BC847BW
2I33 1n0
3IB7 330R
3IB6 1K0
2I34 10u 16V
5I04
+3V3_SIM
II96
5I02
II85
PCA9515DP
7I10
VCC
SDA0
SDA1
SCL0
SCL1
EN
NC
GND
3IB1 10K
3IB3 10K
2I59 100n
6I04 BAV99 COL
II89
II95
6I03 BAV99 COL
SDA-S
3IBA 100R
SDA-DISP
SCL-S
3IBB 100R
SCL-DISP
9I05 RES
9I06 RES
B5a
STATUS-SC3
3IF0 100R
2IA3 1n0
STATUS-SC3-F
B14d
SEL_IN_1_B
5I21
SEL_IN_1_BF
2I64 100p
9ID0
+5V2-STBY
3IB8 10K
B5a
ON-OFF-LED
3I00 10K
IIE8
7I11 BC847BW
IIE9
3IB9 100R
LED1
3IGH 100K
2I62 100p
B6c,B14b
SURR-R
3IS3 100R
2IJ6 100p
SURR-RF
B6c,B14b
SURR-L
3IS6 100R
2IJ7 100p
SURR-LF
NC
NC
NC
NC
B21
B21
B21
B21
B21
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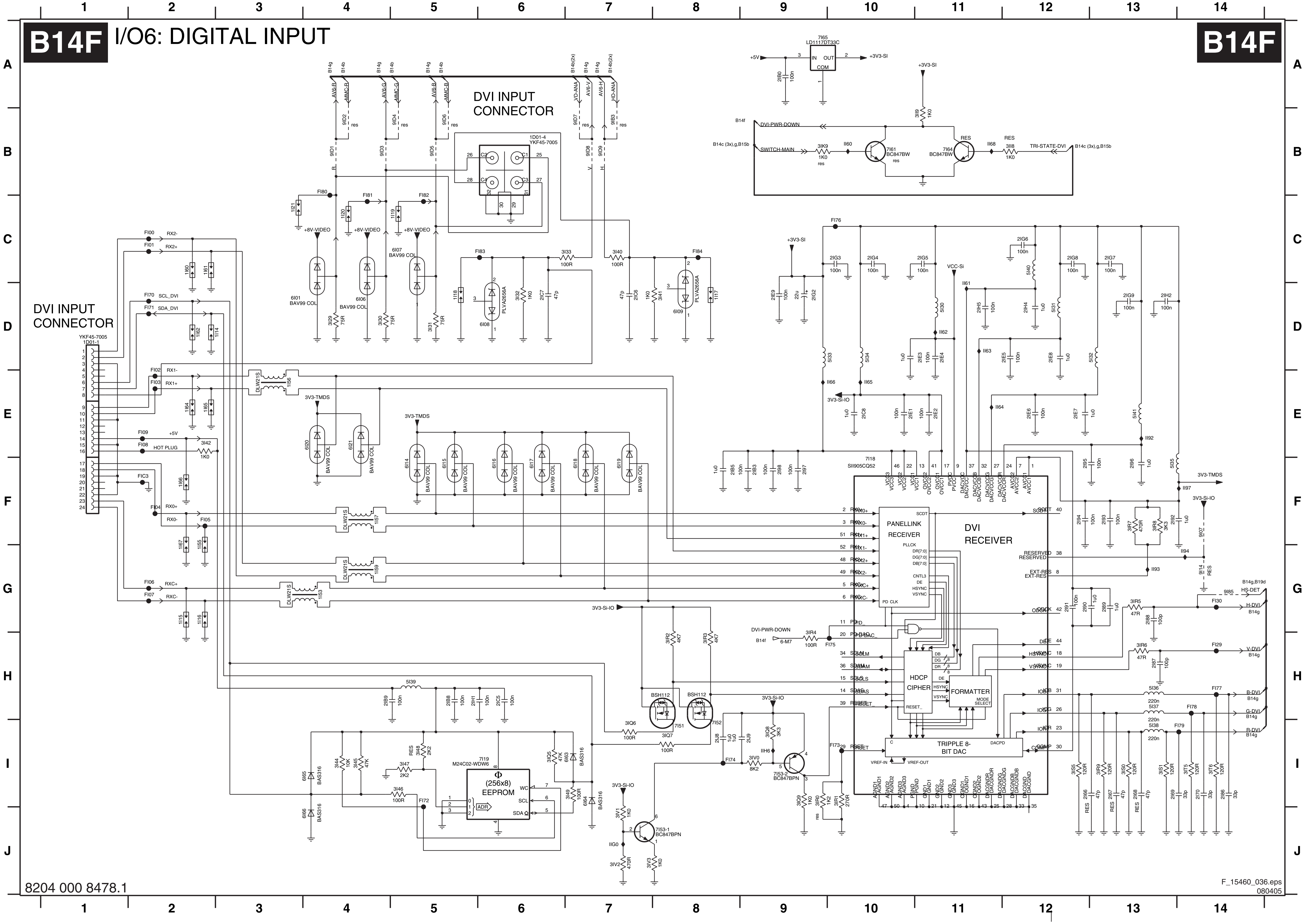
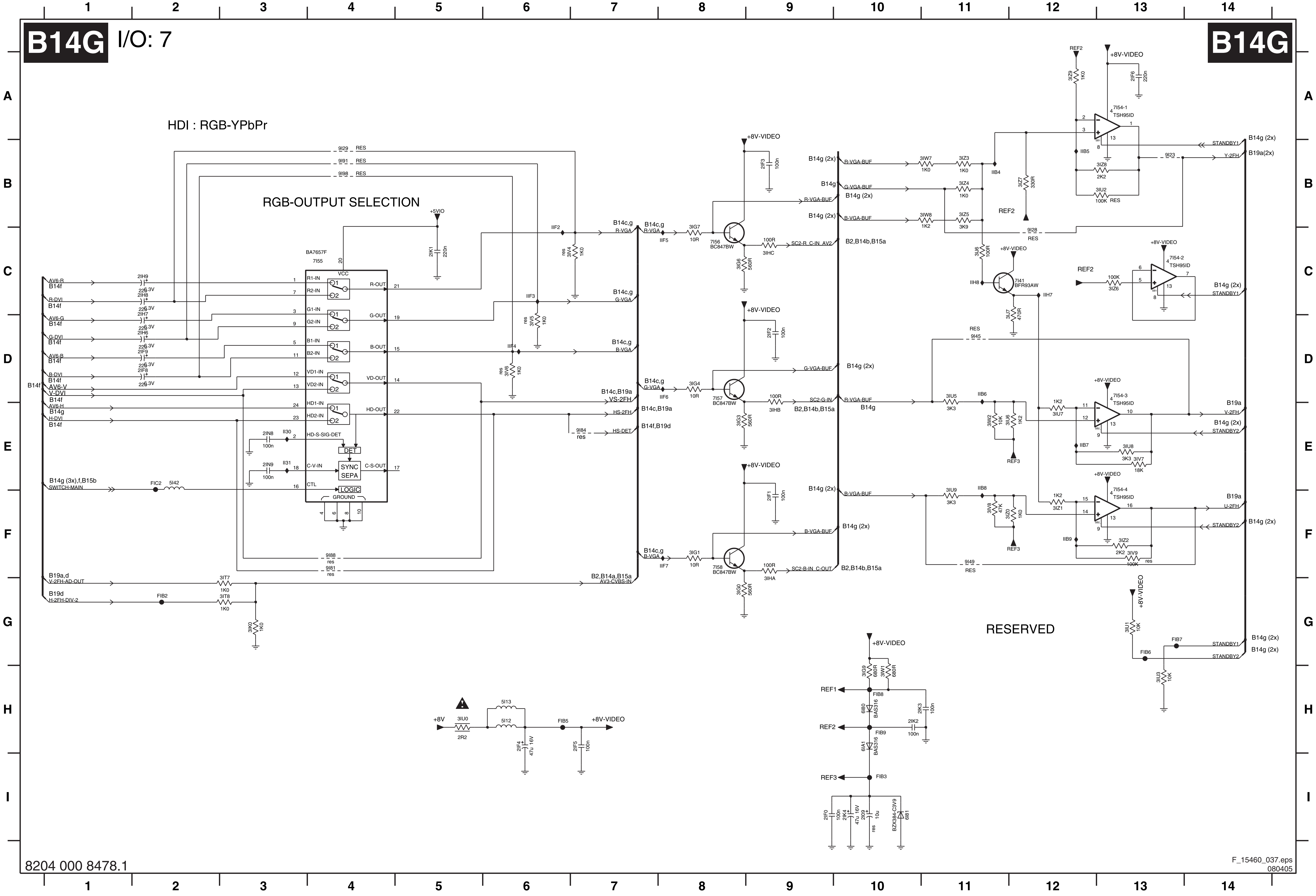
080405

SSB: I/O6: Digital Input


B14F
I/O6: DIGITAL INPUT
B14F
DVI INPUT CONNECTOR
DVI INPUT CONNECTOR
YKF45-7005
1D01-1
1D01-4
YKF45-7005
7I65
LD1117DT33C
+5V
+3V3-SI
DVI-PWR-DOWN
SWITCH-MAIN
TRI-STATE-DVI
7I61 BC847BW
7I64 BC847BW
+8V-VIDEO
BAV99 COL
PLVA2656A
3V3-TMDS
DLW21S
7I18
SII905CQ52
PANELLINK RECEIVER
DVI RECEIVER
HDCP CIPHER
FORMATTER
TRIPPLE 8-BIT DAC
3V3-SI-IO
BSH112
7I19
M24C02-WDW6
(256x8) EEPROM
BAS316
7I53-1 BC847BPN
7I53-2 BC847BPN
H-DVI
V-DVI
B-DVI
G-DVI
R-DVI
HS-DET
HOT PLUG
RX2-
RX2+
RX1-
RX1+
RX0+
RX0-
RXC+
RXC-
SCL_DVI
SDA_DVI
8204 000 8478.1
F_15460_036.eps
080405

1D01-1	D1
1D01-4	B6
1I14	D2
1I15	G2
1I16	G2
1I17	D8
1I18	D5
1I19	C5
1I20	C4
1I21	C3
1I53	G4
1I55	F2
1I56	E3
1I57	F4
1I59	G4
1I60	C2
1I61	C2
1I62	D2
1I64	E2
1I65	E2
1I66	F2
1I67	F2
2I66	I12
2I67	I13
2I68	I13
2I69	I13
2I70	I14
2I86	I14
2I87	H13
2I88	G13
2I89	G13
2I90	G12
2I91	G12
2I92	F13
2I93	F13
2I94	F12
2I95	F12
2I96	F13
2I97	F9
2I98	F9
2IB0	A9
2IB3	F9
2IB5	F8
2IB8	H5
2IB9	H4
2IC5	H6
2IC6	D7
2IC7	D6
2IC8	E10
2IE1	E10
2IE2	E11
2IE3	D11
2IE4	D11
2IE5	D12
2IE6	E12
2IE7	E12
2IE8	D12
2IE9	D9
2IG2	D9
2IG3	C10
2IG4	C10
2IG5	C11
2IG6	C12
2IG7	C13
2IG8	C12
2IG9	D13
2IH1	H5
2IH2	D13
2IH4	D12
2IH5	D11
2IJ8	I8
2IJ9	I9
3I29	D4
3I30	D4
3I31	D5
3I32	D6
3I33	C7
3I40	C7
3I41	D8
3I42	E2
3I44	I4
3I45	I4
3I46	I5
3I47	I5
3I48	I5
3I49	I7
3II8	B12
3II9	B11
3IK9	B9
3IQ5	I6
3IQ6	I7
3IQ7	I8
3IQ8	I9
3IQ9	I9
3IR0	I9
3IR1	I10
3IR2	H8
3IR3	H8
3IR4	H9
3IR5	G13
3IR6	H13
3IR7	F13
3IR8	F13
3IR9	I13
3IS0	I13
3IS1	I13
3IS5	I12
3IT5	I14
3IT6	I14
3IV0	I9
3IV1	J7
3IV2	J7
3IV3	J7
5I30	D11
5I31	D12
5I32	D13
5I33	D10
5I34	D10
5I35	F13
5I36	H13
5I37	H13
5I38	I13
5I39	H5
5I40	C12
5I41	E13
6I01	D3
6I06	D4
6I07	C5
6I08	C6
6I09	C8
6I14	F5
6I15	F5
6I16	F6
6I17	F6
6I18	F7
6I19	F7
6I20	E4
6I21	E4
6I63	I7
6I64	I7
6I65	I4
6I66	J4
7I18	F10
7I19	I6
7I51	I8
7I52	I8
7I53-1	J8
7I53-2	I9
7I61	B10
7I64	B11
7I65	A9
9I07	F14
9I14	G14
9I85	G14
9IB3	B7
9ID1	B4
9ID2	B4
9ID3	B4
9ID4	B5
9ID5	B5
9ID6	B5
9ID7	B7
9ID8	B7
9ID9	B7
FI00	C2
FI01	C2
FI02	E2
FI03	E2
FI04	F2
FI05	F2
FI06	G2
FI07	G2
FI08	E2
FI09	E2
FI29	H14
FI30	G14
FI70	D2
FI71	D2
FI72	I5
FI73	I10
FI74	I8
FI75	H10
FI76	C10
FI77	H14
FI78	H14
FI79	I14
FI80	B4
FI81	C4
FI82	C5
FI83	C6
FI84	C8
FIC3	F2
II60	B10
II61	D11
II62	D11
II63	D11
II64	E11
II65	E10
II66	E10
II68	B11
II92	E13
II93	G13
II94	G14
II97	F14
IIG0	J7
IIH6	I9

SSB: I/O: 7


B14G
I/O: 7
B14G
HDI : RGB-YPbPr
RGB-OUTPUT SELECTION
BA7657F
7I55
VCC
R1-IN
R2-IN
G1-IN
G2-IN
B1-IN
B2-IN
VD1-IN
VD2-IN
HD1-IN
HD2-IN
HD-S-SIG-DET
C-V-IN
CTL
R-OUT
G-OUT
B-OUT
VD-OUT
HD-OUT
C-S-OUT
DET
SYNC SEPA
LOGIC
GROUND
+5VIO
AV6-R
R-DVI
AV6-G
G-DVI
AV6-B
B-DVI
AV6-V
V-DVI
AV6-H
H-DVI
B14f
B14g
B14g (3x),f,B15b
SWITCH-MAIN
B19a,d
V-2FH-AD-OUT
B19d
H-2FH-DIV-2
B14c,g
R-VGA
G-VGA
B-VGA
B14c,B19a
VS-2FH
HS-2FH
B14f,B19d
HS-DET
B2,B14a,B15a
AV3-CVBS-IN
+8V-VIDEO
7I56 BC847BW
7I57 BC847BW
7I58 BC847BW
SC2-R_C-IN_AV2
SC2-G-IN
SC2-B-IN_C-OUT
B2,B14b,B15a
R-VGA-BUF
G-VGA-BUF
B-VGA-BUF
7I54-1 TSH95ID
7I54-2 TSH95ID
7I54-3 TSH95ID
7I54-4 TSH95ID
7I41 BFR93AW
REF1
REF2
REF3
STANDBY1
STANDBY2
Y-2FH
V-2FH
U-2FH
B14g (2x)
B19a(2x)
B19a
RESERVED
+8V
5I12
5I13
3IU0 2R2
BAS316
BZX384-C3V9
res
8204 000 8478.1
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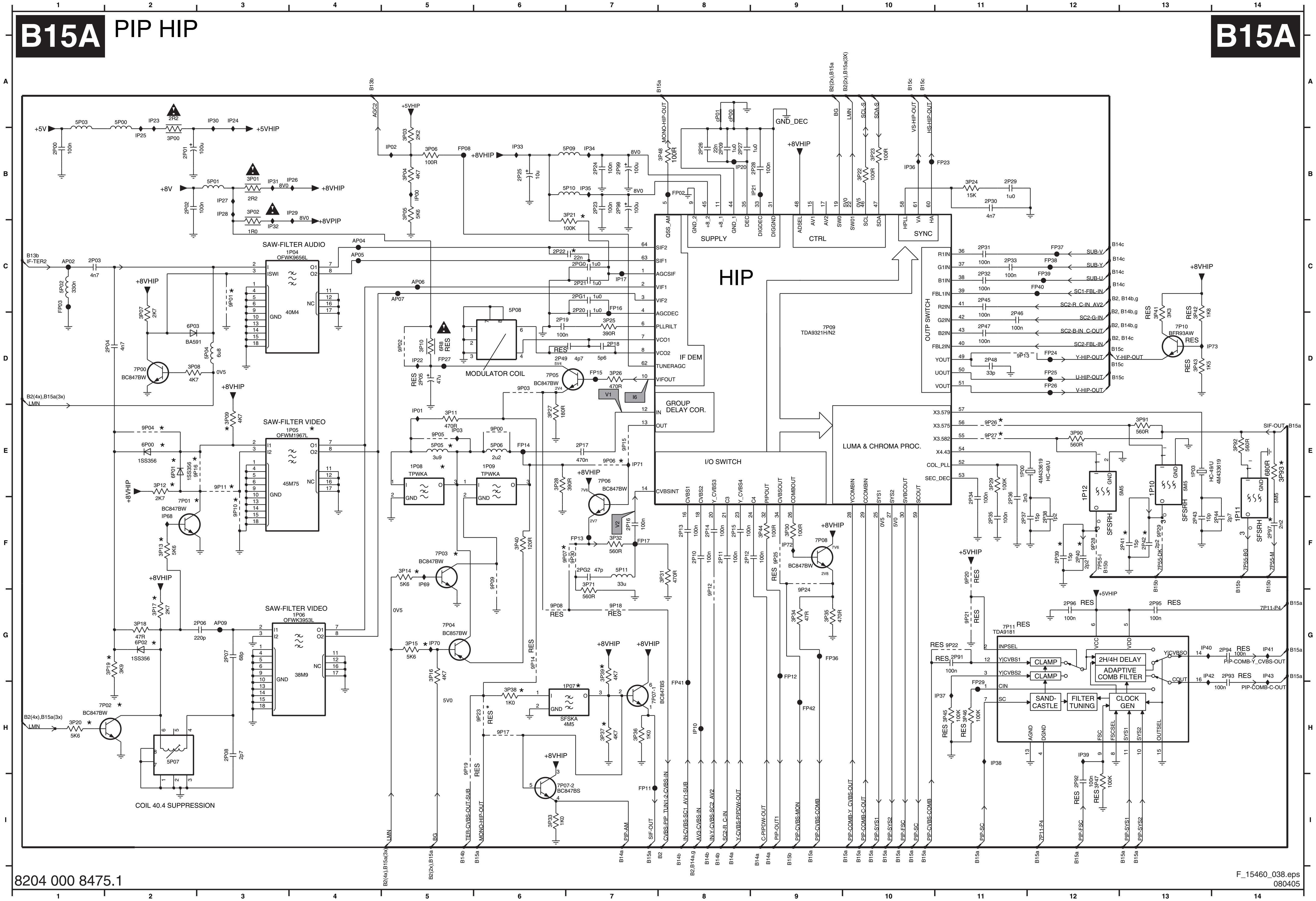
2I09	I10
2IF0	I9
2IF1	F9
2IF2	D9
2IF3	B9
2IF4	H6
2IF5	H7
2IF6	A13
2IF8	D2
2IF9	D2
2IH6	D2
2IH7	D2
2IH8	C2
2IH9	C2
2IK1	C5
2IK2	H10
2IK3	H11
2IK4	I10
2IN8	E3
2IN9	E3
3IG0	G8
3IG1	F8
3IG3	E8
3IG4	D8
3IG6	C8
3IG7	C8
3IG9	H10
3IHA	F9
3IHB	E9
3IHC	C9
3IJ6	C11
3IJ7	C12
3IK0	G3
3IT7	G3
3IT8	G3
3IU0	H5
3IU1	G13
3IU2	B13
3IU3	H13
3IU5	D11
3IU6	E12
3IU7	E12
3IU8	E13
3IU9	F11
3IV4	C7
3IV5	D6
3IV6	D6
3IV7	E13
3IV8	F11
3IV9	F13
3IW1	H10
3IW2	E11
3IW7	B11
3IW8	B11
3IZ0	F12
3IZ1	F12
3IZ2	F13
3IZ3	B11
3IZ4	B11
3IZ5	B11
3IZ6	C13
3IZ7	B12
3IZ8	B13
3IZ9	A12
5I12	H6
5I13	H6
5I42	E2
6I80	H10
6I81	I10
6IA1	H10
7I41	C12
7I54-A	A13
7I54-B	C13
7I54-C	D13
7I54-D	F13
7I55	C4
7I56	C8
7I57	D8
7I58	F8
9I23	B13
9I28	C12
9I29	B4
9I45	D11
9I49	F11
9I81	F4
9I84	E7
9I88	F4
9I91	B4
9I98	B4
FIB2	G2
FIB3	I10
FIB5	H6
FIB6	G13
FIB7	G13
FIB8	H10
FIB9	H10
FIC2	E2
II30	E3
II31	E3
IIB4	B11
IIB5	B12
IIB6	D11
IIB7	E12
IIB8	E11
IIB9	F12
IIF2	B6
IIF3	C6
IIF4	D6
IIF5	C8
IIF6	D8
IIF7	F8
IIH7	C12
IIH8	C11

SSB: PIP HIP


B15A
PIP HIP
B15A
HIP
SUPPLY
CTRL
SYNC
IF DEM
GROUP DELAY COR.
I/O SWITCH
LUMA & CHROMA PROC.
OUTP SWITCH
7P09 TDA9321H/N2
SAW-FILTER AUDIO
1P04 OFWK9656L
SAW-FILTER VIDEO
1P05 OFWM1967L
SAW-FILTER VIDEO
1P06 OFWK3953L
MODULATOR COIL
COIL 40.4 SUPPRESSION
7P11 TDA9181
2H/4H DELAY
ADAPTIVE COMB FILTER
CLAMP
CLAMP
SAND-CASTLE
FILTER TUNING
CLOCK GEN
+5VHIP
+8VHIP
+8VPIP
8204 000 8475.1
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080405

1P00	E11
1P03	E13
1P04	C4
1P05	E4
1P06	G4
1P07	H7
1P08	E5
1P09	E6
1P10	E13
1P11	F14
1P12	E12
2P00	B1
2P01	B2
2P02	B2
2P03	C1
2P04	D2
2P05	D5
2P06	G3
2P07	G3
2P08	H3
2P09	B8
2P10	F8
2P11	F8
2P12	F8
2P13	F8
2P14	F8
2P15	F8
2P16	F7
2P17	E7
2P18	D7
2P19	D6
2P20	C7
2P21	C7
2P22	C6
2P23	B7
2P24	B7
2P25	B6
2P26	B8
2P27	B8
2P28	B9
2P29	B11
2P30	B11
2P31	C11
2P32	C11
2P33	C11
2P34	F11
2P35	F11
2P36	F11
2P37	F11
2P38	F12
2P39	F12
2P40	F12
2P41	F13
2P42	F13
2P43	F13
2P44	F14
2P45	C11
2P46	D11
2P47	D11
2P48	D11
2P49	D6
2P91	G11
2P92	I12
2P93	G14
2P94	G14
2P95	G13
2P96	G12
2P97	F14
2P98	B7
2P99	B7
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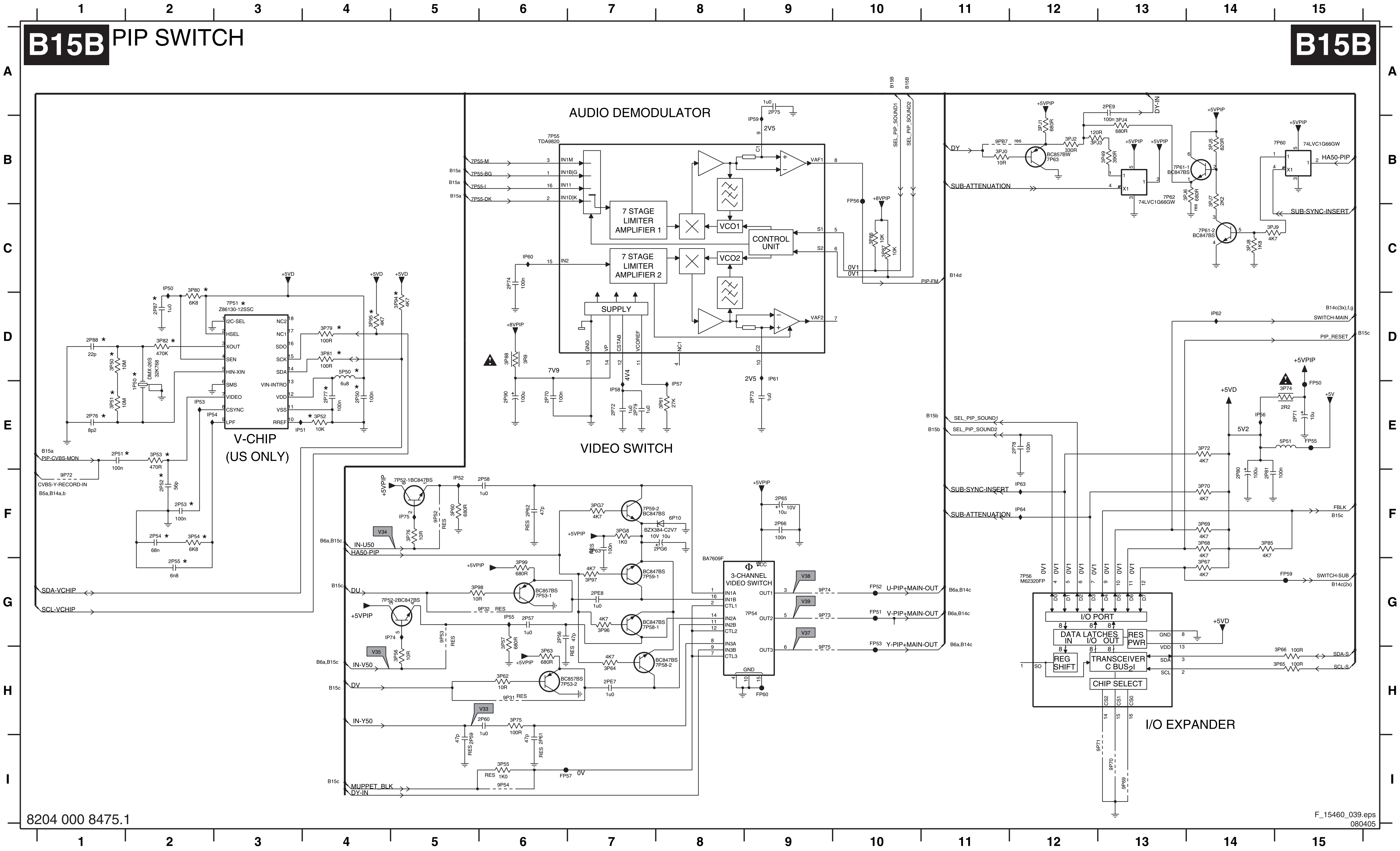
2PG1	C7
2PG2	F7
3P00	B2
3P01	B3
3P02	B3
3P03	B5
3P04	B5
3P05	B5
3P06	B5
3P07	D2
3P08	D2
3P09	E3
3P10	D5
3P11	E5
3P12	E2
3P13	F2
3P14	F5
3P15	G5
3P16	G5
3P17	G2
3P18	G2
3P19	G2
3P20	H1
3P21	B7
3P22	B10
3P23	B10
3P24	B11
3P25	D7
3P26	D7
3P27	E6
3P28	E6
3P29	E11
3P30	F9
3P31	F8
3P32	F7
3P33	I6
3P34	G9
3P35	G9
3P36	H7
3P37	H7
3P38	H6
3P39	G7
3P40	F6
3P41	D13
3P42	D13
3P43	D13
3P44	F9
3P45	H11
3P46	H11
3P47	I12
3P48	B8
3P71	F7
3P90	E12
3P91	E13
3P92	E14
3P93	E14
5P00	A2
5P01	B3
5P02	C1
5P03	A1
5P04	D3
5P05	E5
5P06	E6
5P07	H2
5P08	C6
5P09	B7
5P10	B7
5P11	F7
6P00	E2
6P01	E2
6P02	G2
6P03	D2
7P00	D2
7P01	F2
7P02	H1
7P03	F5
7P04	G5
7P05	D6
7P06	E7
7P07-1	H7
7P07-2	I6
7P08	F9
7P09	D9
7P10	D13
7P11	G11
9P00	E6
9P01	C3
9P02	D5
9P03	D6
9P04	E2
9P05	E5
9P06	E7
9P07	F7
9P08	G6
9P09	F6
9P10	F3
9P11	E3
9P12	G8
9P13	D11
9P14	G6
9P15	E7
9P16	E3
9P17	H6
9P18	G7
9P19	H5
9P20	F11
9P21	G11
9P22	G11
9P23	H6
9P24	G9
9P25	F9
9P26	E11
9P27	E11
9P28	F12
9P29	F13
9P30	F7
AP02	C1
AP04	C4
AP05	C4
AP06	C5
AP07	C5
AP09	G3
FP02	B8
FP03	C1
FP08	B5
FP11	I7
FP12	G9
FP13	F7
FP14	E6
FP15	D7
FP16	C7
FP17	F7
FP23	B11
FP24	D12
FP25	D12
FP26	D12
FP27	D5
FP29	H11
FP36	G9
FP37	C12
FP38	C12
FP39	C12
FP40	C12
FP41	H8
FP42	H9
IP00	B5
IP01	E5
IP02	B5
IP03	E5
IP10	H8
IP17	C7
IP20	B8
IP21	B9
IP22	D5
IP23	A2
IP24	A3
IP25	B2
IP26	B4
IP27	B3
IP28	B3
IP29	B4
IP30	A3
IP31	B3
IP32	C3
IP33	B6
IP34	B7
IP35	B7
IP36	B10
IP37	H11
IP38	H11
IP39	H12
IP40	G13
IP41	G14
IP42	G13
IP43	G14
IP68	F2
IP69	F5
IP70	G5
IP71	E7
IP72	F9
IP73	D14
cP00	A8
cP01	A8

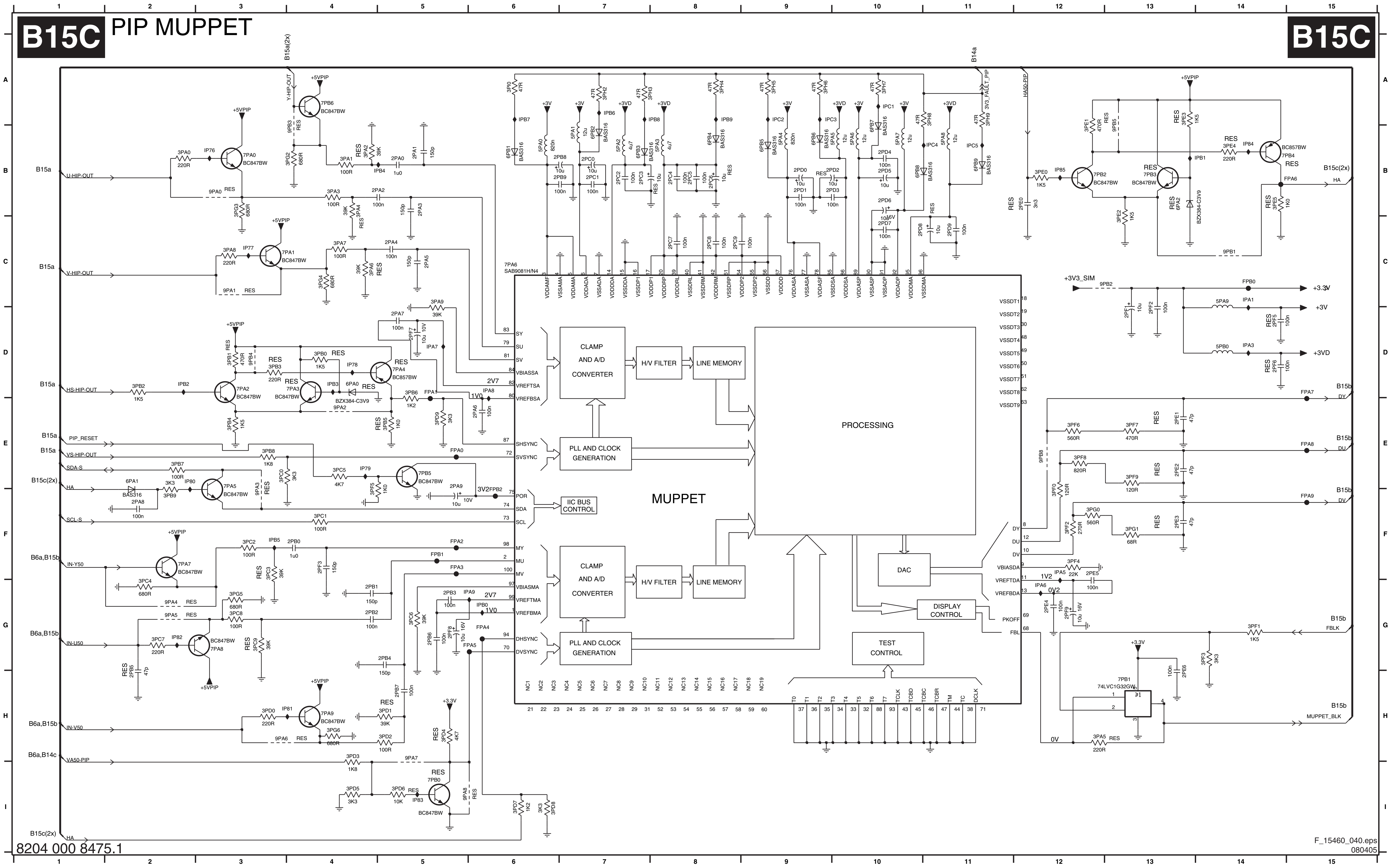
SSB: PIP Switch

1P50 E2
2P50 E4
2P51 E1
2P52 F2
2P53 F2
2P54 F2
2P55 G2
2P56 G6
2P57 G6
2P58 F6
2P59 I5
2P60 H6
2P61 I6
2P62 F6
2P63 F7
2P65 F9
2P66 F9
2P70 E6
2P71 E15
2P72 E7
2P73 E9
2P74 C6
2P75 A9
2P76 E1
2P77 E4
2P78 E12
2P79 E7
2P80 F14
2P81 F14
2P87 D2
2P88 D1
2P90 E6
2PE7 H7
2PE8 G7
2PE9 A13
2PG6 F8
3P49 B13
3P50 D1
3P51 E1
3P52 E4
3P53 E2
3P54 F2
3P55 I6
3P56 H5
3P57 G6
3P60 F5
3P61 E8
3P62 H6
3P63 H6
3P64 H7
3P65 H15
3P66 H15
3P67 G14
3P68 F14
3P69 F14
3P70 F14
3P72 E14
3P74 E15
3P75 H6
3P76 F5
3P79 D4
3P80 C2
3P81 D4
3P82 D2
3P85 F14
3P86 C10
3P87 C10
3P88 D6
3P94 D5
3P95 D4
3P96 G7
3P97 G7
3P98 G5
3P99 G6
3PG7 F7
3PG8 F7
3PJ0 B11
3PJ1 B12
3PJ2 B12
3PJ3 B12
3PJ4 B13
3PJ5 B14
3PJ6 B14
3PJ7 B14
3PJ8 C14
3PJ9 C14
5P50 D4
5P51 E15
6P10 F8
7P51 D3
7P52-1 F5
7P52-2 G4
7P53-1 G6
7P53-2 H6
7P54 G9
7P55 B6
7P56 G12
7P58-1 G7
7P58-2 H7
7P59-1 G7
7P59-2 F7
7P60 B15
7P61-1 B14
7P61-2 C14
7P62 B13
7P63 B12
9P31 H6
9P32 G6
9P52 F5
9P53 G5
9P54 I6
9P69 I13
9P70 I13
9P71 I13
9P72 F1
9P73 G9
9P74 G9
9P75 H9
9PB7 B11
FP50 E15
FP51 G10
FP52 G10
FP53 G10
FP55 E15
FP56 B10
FP57 I6
FP59 G15
FP60 H9
IP50 C2
IP51 E3
IP52 F5
IP53 E2
IP54 E2
IP55 G6
IP56 E14
IP57 E8
IP58 E7
IP59 B9
IP60 C6
IP61 D9
IP62 D14
IP63 F12
IP64 F12
IP74 G4
IP75 F5


B15B
PIP SWITCH
AUDIO DEMODULATOR
7P55
TDA9820
7 STAGE LIMITER AMPLIFIER 1
7 STAGE LIMITER AMPLIFIER 2
VCO1
VCO2
CONTROL UNIT
SUPPLY
VIDEO SWITCH
V-CHIP (US ONLY)
7P51
Z86130-12SSC
3-CHANNEL VIDEO SWITCH
BA7609F
I/O EXPANDER
7P56
M62320FP
I/O PORT
DATA LATCHES
RES PWR
REG SHIFT
TRANSCEIVER C BUS
CHIP SELECT
74LVC1G66GW
HA50-PIP
SUB-SYNC-INSERT
SUB-ATTENUATION
SWITCH-MAIN
PIP_RESET
SWITCH-SUB
FBLK
SDA-S
SCL-S
U-PIP+MAIN-OUT
V-PIP+MAIN-OUT
Y-PIP+MAIN-OUT
SEL_PIP_SOUND1
SEL_PIP_SOUND2
PIP-FM
DY
DY-IN
IN-U50
HA50-PIP
DU
IN-V50
DV
IN-Y50
MUPPET_BLK
SDA-VCHIP
SCL-VCHIP
PIP-CVBS-MON
CVBS-Y-RECORD-IN
8204 000 8475.1
F_15460_039.eps
080405

SSB: PIP Muppet

2PA0 B5
2PA1 B5
2PA2 B5
2PA3 B5
2PA4 C5
2PA5 C5
2PA6 E6
2PA7 D5
2PA8 F2
2PA9 E5
2PB0 F4
2PB1 G4
2PB2 G4
2PB3 G5
2PB4 G5
2PB5 H2
2PB6 G5
2PB7 H5
2PB8 B7
2PB9 B7
2PC0 B7
2PC1 B7
2PC2 B7
2PC3 B7
2PC4 B8
2PC5 B8
2PC6 B8
2PC7 C8
2PC8 C8
2PC9 C8
2PD0 B9
2PD1 B9
2PD2 B10
2PD3 B10
2PD4 B10
2PD5 B10
2PD6 B10
2PD7 C10
2PD8 C10
2PD9 C11
2PE0 B12
2PE1 E13
2PE2 E13
2PE3 F13
2PE4 G12
2PE5 F12
2PE6 H13
2PF1 D13
2PF2 D13
2PF3 F4
2PF5 D14
2PF6 D14
2PF7 D5
2PF8 G5
2PF9 G12
3PA0 B2
3PA1 B4
3PA2 B4
3PA3 B4
3PA4 B4
3PA5 H12
3PA6 C4
3PA7 C4
3PA8 C3
3PA9 C5
3PB0 D4
3PB1 D3
3PB2 D2
3PB3 D3
3PB4 E3
3PB5 E5
3PB6 D5
3PB7 E2
3PB8 E3
3PB9 F2
3PC0 E3
3PC1 F4
3PC2 F3
3PC3 F3
3PC4 G2
3PC5 E4
3PC6 G5
3PC7 G2
3PC8 G3
3PC9 G3
3PD0 H3
3PD1 H5
3PD2 H5
3PD3 H4
3PD4 H5
3PD5 I4
3PD6 I5
3PD7 I6
3PD8 I6
3PD9 E5
3PE0 B12
3PE1 B12
3PE2 C13
3PE3 A13
3PE4 B14
3PE5 B14
3PF0 F12
3PF1 G14
3PF2 F12
3PF3 G14
3PF4 F12
3PF5 F4
3PF6 E12
3PF7 E13
3PF8 E12
3PF9 E13
3PG0 F12
3PG1 F13
3PG2 B4
3PG3 B3
3PG4 C4
3PG5 G3
3PG6 H4
3PH2 A7
3PH3 A7
3PH4 A8
3PH5 A9
3PH6 A9
3PH7 A10
3PH8 A11
3PH9 A11
3PI0 A6
5PA0 B6
5PA1 B7
5PA2 B7
5PA3 B8
5PA4 B9
5PA5 B10
5PA6 B10
5PA7 B10
5PA8 B11
5PA9 C14
5PB0 D14
6PA0 D4
6PA1 E2
6PA2 B13
6PB1 B6
6PB2 B7
6PB3 B7
6PB4 B8
6PB5 B9
6PB6 B9
6PB7 B10
6PB8 B10
6PB9 B11
7PA0 B3
7PA1 C3
7PA2 D3
7PA3 D4
7PA4 D5
7PA5 E3
7PA6 C6
7PA7 F2
7PA8 G3
7PA9 H4
7PB0 I5
7PB1 H13
7PB2 B12
7PB3 B13
7PB4 B14
7PB5 E5
7PB6 A4
9PA0 B3
9PA1 C3
9PA2 E4
9PA3 F3
9PA4 G2
9PA5 G2
9PA6 H3
9PA7 H5
9PA8 I5
9PB1 C14
9PB2 C13
9PB3 B4
9PB4 D3
9PB5 B13
9PB8 E12
FPA0 E5
FPA1 D5
FPA2 F5
FPA3 F5
FPA4 G6
FPA5 G6
FPA6 B15
FPA7 D15
FPA8 E15
FPA9 F15
FPB0 C14
FPB1 F5
FPB2 F6
IP76 B3
IP77 C3
IP78 D4
IP79 E4
IP80 E2
IP81 H4
IP82 G2
IP83 I5
IP84 B14
IP85 B12
IPA1 C14
IPA3 D14
IPA5 F12
IPA6 G12
IPA7 D5
IPA8 D6
IPA9 G6
IPB0 G6
IPB1 B14
IPB2 D2
IPB3 D4
IPB4 B5
IPB5 F3
IPB6 A7
IPB7 A6
IPB8 A8
IPB9 A8
IPC1 A10
IPC2 A9
IPC3 A9
IPC4 B11
IPC5 B11


B15C
PIP MUPPET
B15C
B15a(2x)
B14a
Y-HIP-OUT
3V3_FAULT_PIP
HA50-PIP
+5VPIP
B15a
U-HIP-OUT
B15a
V-HIP-OUT
B15a
HS-HIP-OUT
B15a
PIP_RESET
B15a
VS-HIP-OUT
SDA-S
B15c(2x)
HA
SCL-S
B6a,B15b
IN-Y50
B6a,B15b
IN-U50
B6a,B15b
IN-V50
B6a,B14c
VA50-PIP
B15c(2x)
HA
7PA0 BC847BW
7PA1 BC847BW
7PA2 BC847BW
7PA3 BC847BW
7PA4 BC857BW
7PA5 BC847BW
7PA7 BC847BW
7PA8 BC847BW
7PA9 BC847BW
7PB0 BC847BW
7PB2 BC847BW
7PB3 BC847BW
7PB4 BC857BW
7PB5 BC847BW
7PB6 BC847BW
6PA0 BZX384-C3V9
6PA2 BZX384-C3V9
6PA1 BAS316
7PA6 SAB9081H/N4
CLAMP AND A/D CONVERTER
H/V FILTER
LINE MEMORY
PROCESSING
PLL AND CLOCK GENERATION
IIC BUS CONTROL
MUPPET
DAC
DISPLAY CONTROL
TEST CONTROL
SY SU SV VBIASSA VREFTSA VREFBSA
SHSYNC SVSYNC
POR SDA SCL
MY MU MV VBIASMA VREFTMA VREFBMA
DHSYNC DVSYNC
VSSDT1 VSSDT2 VSSDT3 VSSDT4 VSSDT5 VSSDT6 VSSDT7 VSSDT8 VSSDT9
DY DU DV VBIASDA VREFTDA VREFBDA PKOFF FBL
2V7
1V0
3V2
1V2
0V2
0V
RES
+3V3_SIM
+3.3V
+3V
+3VD
B15c(2x)
HA
B15b
DY
B15b
DU
B15b
DV
B15b
FBLK
B15b
MUPPET_BLK
7PB1 74LVC1G32GW
8204 000 8475.1
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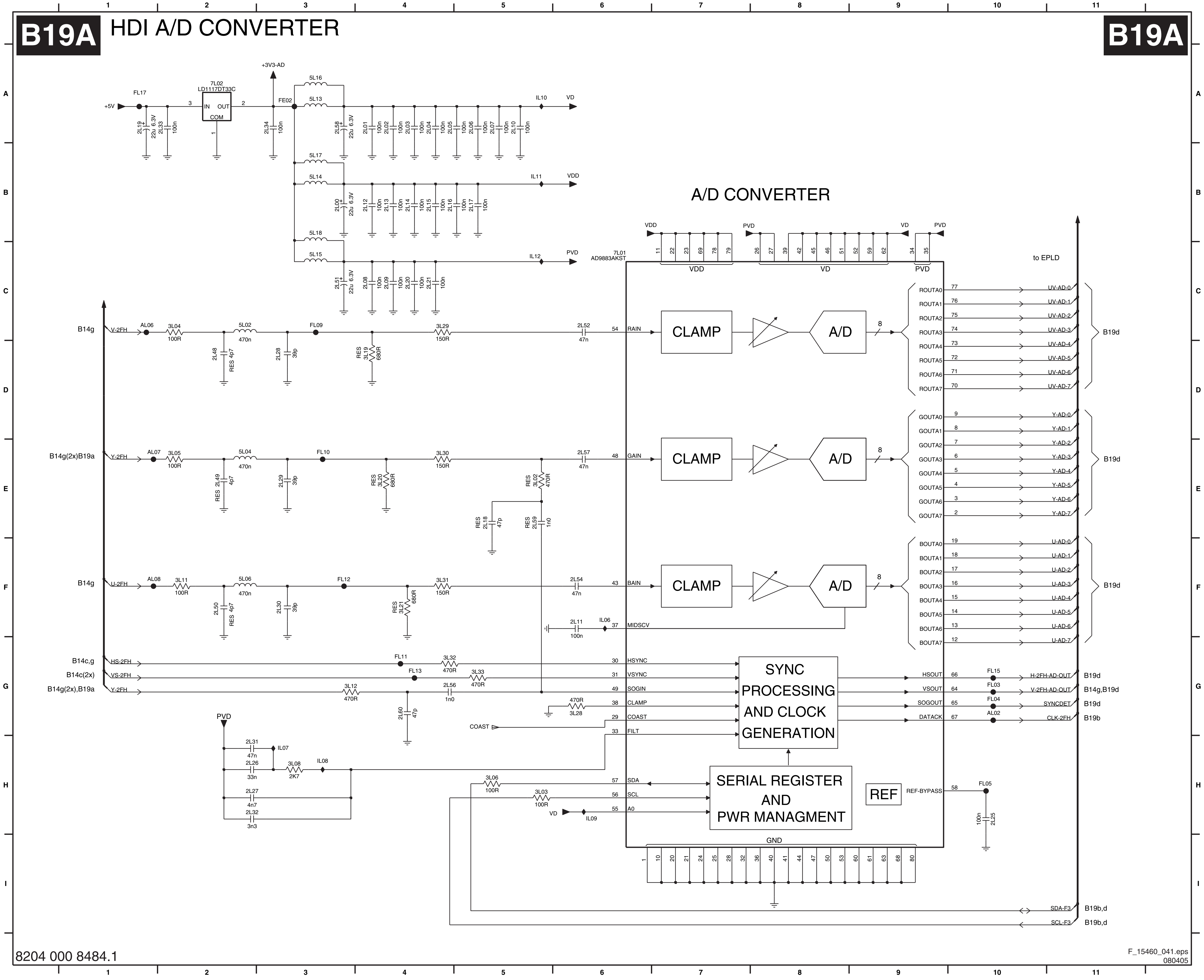
SSB: HDI A/D Converter


B19A
HDI A/D CONVERTER
B19A
+5V
FL17
7L02
LD1117DT33C
IN
OUT
COM
+3V3-AD
FE02
5L16
5L13
5L17
5L14
5L18
5L15
IL10
VD
IL11
VDD
IL12
PVD
2L19 22u 6.3V
2L33 100n
2L34 100n
2L58 22u 6.3V
2L00 22u 6.3V
2L51 22u 6.3V
A/D CONVERTER
7L01
AD9883AKST
VDD
PVD
VD
GND
to EPLD
B14g
V-2FH
AL06
3L04 100R
5L02 470n
FL09
3L29 150R
2L52 47n
RAIN
CLAMP
A/D
8
B14g(2x)B19a
Y-2FH
AL07
3L05 100R
5L04 470n
FL10
3L30 150R
2L57 47n
GAIN
B14g
U-2FH
AL08
3L11 100R
5L06 470n
FL12
3L31 150R
2L54 47n
BAIN
2L11 100n
IL06
MIDSCV
ROUTA0
ROUTA1
ROUTA2
ROUTA3
ROUTA4
ROUTA5
ROUTA6
ROUTA7
UV-AD-0
UV-AD-1
UV-AD-2
UV-AD-3
UV-AD-4
UV-AD-5
UV-AD-6
UV-AD-7
GOUTA0
GOUTA1
GOUTA2
GOUTA3
GOUTA4
GOUTA5
GOUTA6
GOUTA7
Y-AD-0
Y-AD-1
Y-AD-2
Y-AD-3
Y-AD-4
Y-AD-5
Y-AD-6
Y-AD-7
BOUTA0
BOUTA1
BOUTA2
BOUTA3
BOUTA4
BOUTA5
BOUTA6
BOUTA7
U-AD-0
U-AD-1
U-AD-2
U-AD-3
U-AD-4
U-AD-5
U-AD-6
U-AD-7
B19d
B14c,g
HS-2FH
B14c(2x)
VS-2FH
B14g(2x),B19a
Y-2FH
FL11
FL13
3L32 470R
3L33 470R
3L12 470R
2L56 1n0
2L60 47p
470R 3L28
HSYNC
VSYNC
SOGIN
CLAMP
COAST
FILT
COAST
SYNC PROCESSING AND CLOCK GENERATION
HSOUT
VSOUT
SOGOUT
DATACK
FL15
FL03
FL04
AL02
H-2FH-AD-OUT
V-2FH-AD-OUT
SYNCDET
CLK-2FH
B19d
B14g,B19d
B19d
B19b
PVD
2L31 47n
IL07
2L26 33n
3L08 2K7
IL08
2L27 4n7
2L32 3n3
3L06 100R
3L03 100R
SDA
SCL
A0
VD
IL09
SERIAL REGISTER AND PWR MANAGMENT
REF
REF-BYPASS
FL05
2L25 100n
SDA-F3
SCL-F3
B19b,d
B19b,d
8204 000 8484.1
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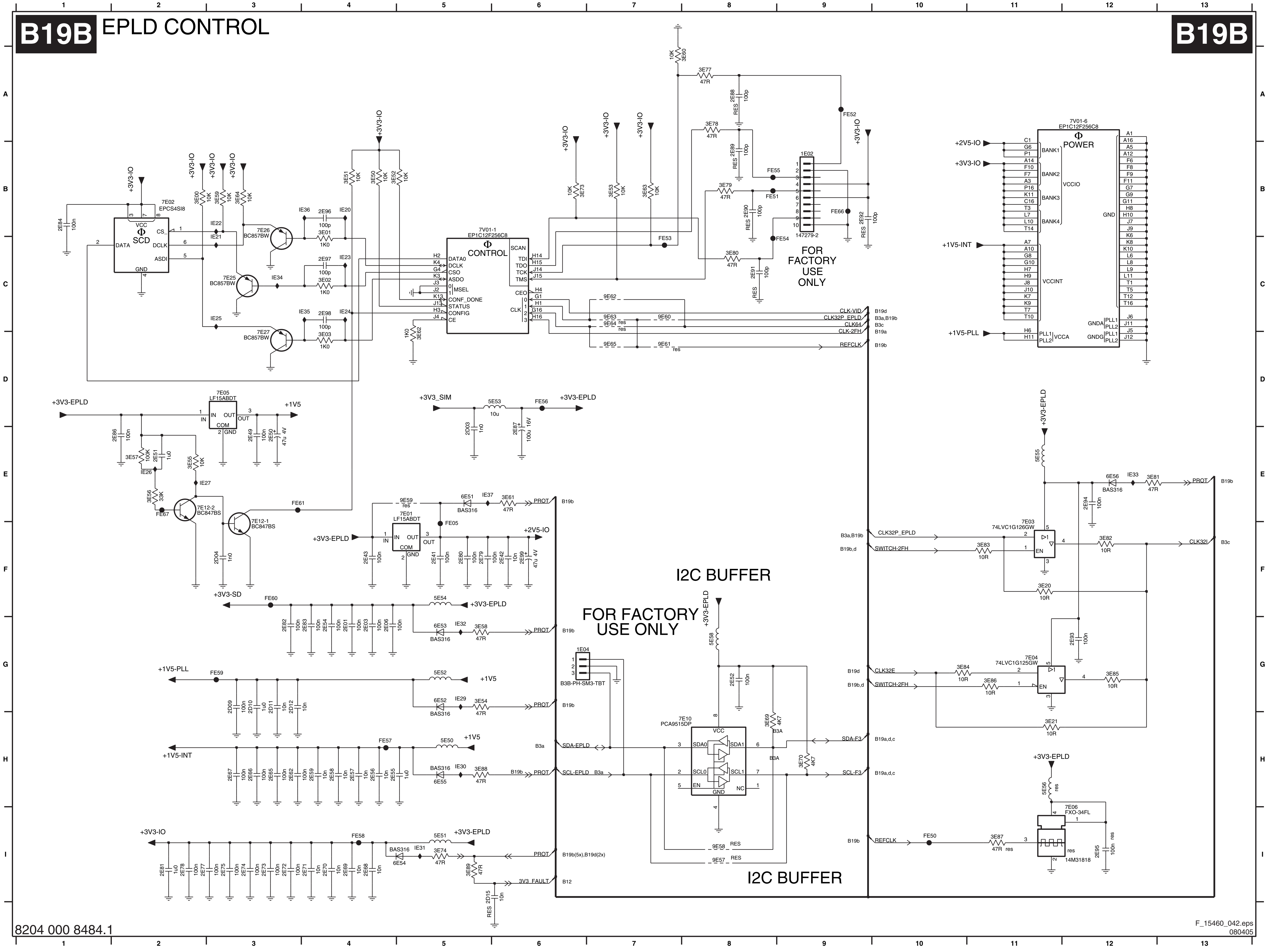
080405

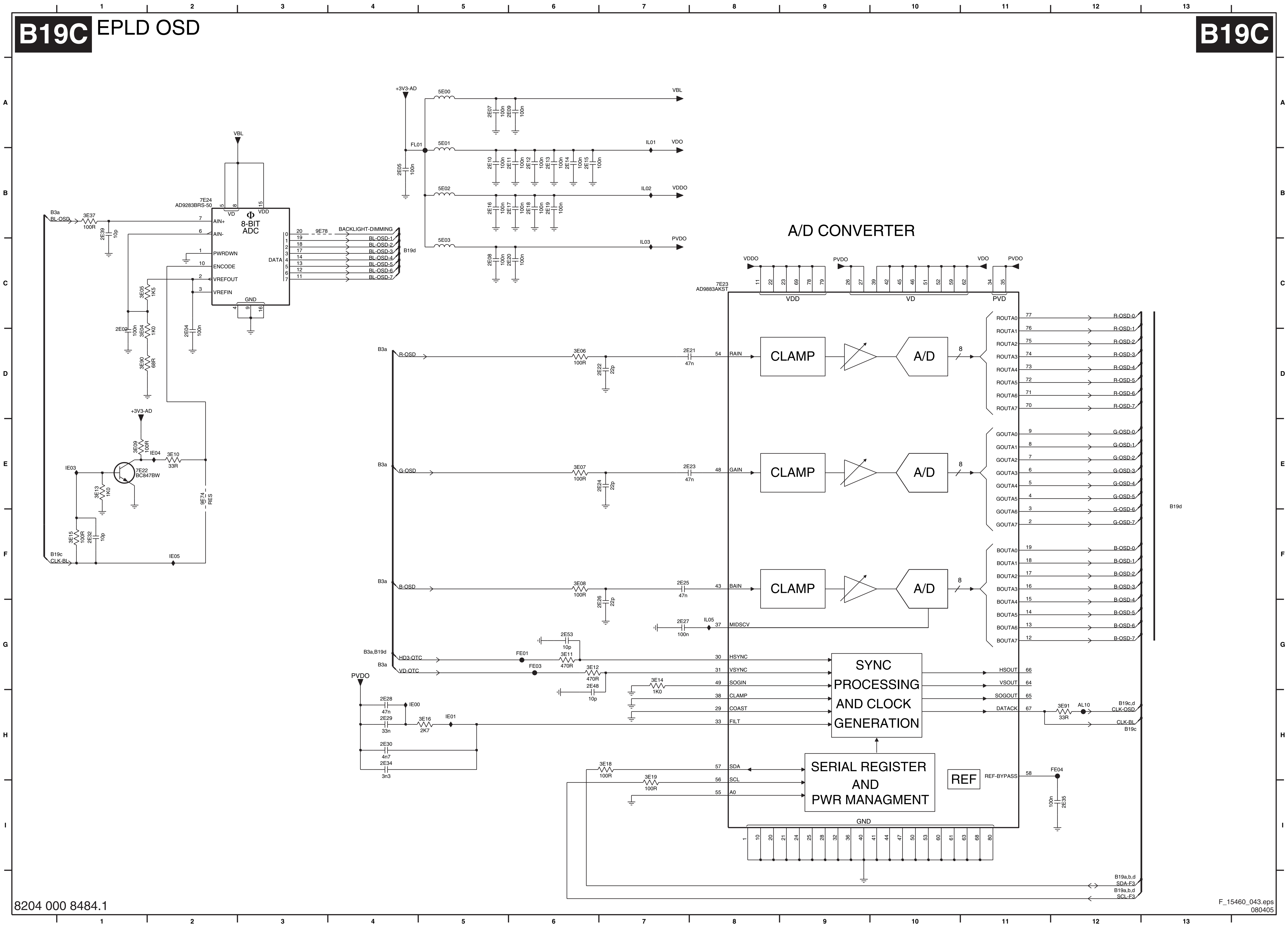
2L00 B3	IL11 B5
2L01 A4	IL12 C5
2L02 A4	
2L03 A4	
2L04 A4	
2L05 A4	
2L06 A5	
2L07 A5	
2L08 C4	
2L09 C4	
2L10 A5	
2L11 F6	
2L12 B4	
2L13 B4	
2L14 B4	
2L15 B4	
2L16 B4	
2L17 B5	
2L18 E5	
2L19 A1	
2L20 C4	
2L21 C4	
2L25 H10	
2L26 H2	
2L27 H2	
2L28 D3	
2L29 E3	
2L30 F3	
2L31 H2	
2L32 H2	
2L33 A2	
2L34 A3	
2L48 D2	
2L49 E2	
2L50 F2	
2L51 C3	
2L52 C6	
2L54 F6	
2L56 G4	
2L57 E6	
2L58 A3	
2L59 E5	
2L60 G4	
3L02 E5	
3L03 H5	
3L04 C2	
3L05 E2	
3L06 H5	
3L08 H3	
3L11 F2	
3L12 G3	
3L19 D4	
3L20 E4	
3L21 F4	
3L28 G6	
3L29 C4	
3L30 E4	
3L31 F4	
3L32 G4	
3L33 G5	
5L02 C2	
5L04 E2	
5L06 F2	
5L13 A3	
5L14 B3	
5L15 C3	
5L16 A3	
5L17 B3	
5L18 B3	
7L01 C6	
7L02 A2	
AL02 G10	
AL06 C1	
AL07 E1	
AL08 F1	
FE02 A3	
FL03 G10	
FL04 G10	
FL05 H10	
FL09 C3	
FL10 E3	
FL11 G4	
FL12 F3	
FL13 G4	
FL15 G10	
FL17 A1	
IL06 F6	
IL07 H3	
IL08 H3	
IL09 H6	
IL10 A5	

SSB: EPLD Control


B19B
EPLD CONTROL
B19B
7E02 EPCS4SI8
SCD
7V01-1 EP1C12F256C8
CONTROL
7V01-6 EP1C12F256C8
POWER
1E02 147279-2
FOR FACTORY USE ONLY
7E05 LF15ABDT
7E01 LF15ABDT
7E25 BC857BW
7E26 BC857BW
7E27 BC857BW
7E12-1 BC847BS
7E12-2 BC847BS
7E03 74LVC1G126GW
7E04 74LVC1G125GW
7E06 FXO-34FL
14M31818
I2C BUFFER
FOR FACTORY USE ONLY
1E04 B3B-PH-SM3-TBT
7E10 PCA9515DP
I2C BUFFER
+3V3-IO
+3V3-EPLD
+1V5
+2V5-IO
+3V3-SD
+1V5-PLL
+1V5-INT
+3V3_SIM
CLK-VID
CLK32P_EPLD
CLK64
CLK-2FH
REFCLK
PROT
SDA-EPLD
SCL-EPLD
SDA-F3
SCL-F3
CLK32E
SWITCH-2FH
CLK32I
3V3_FAULT
8204 000 8484.1
F_15460_042.eps
080405

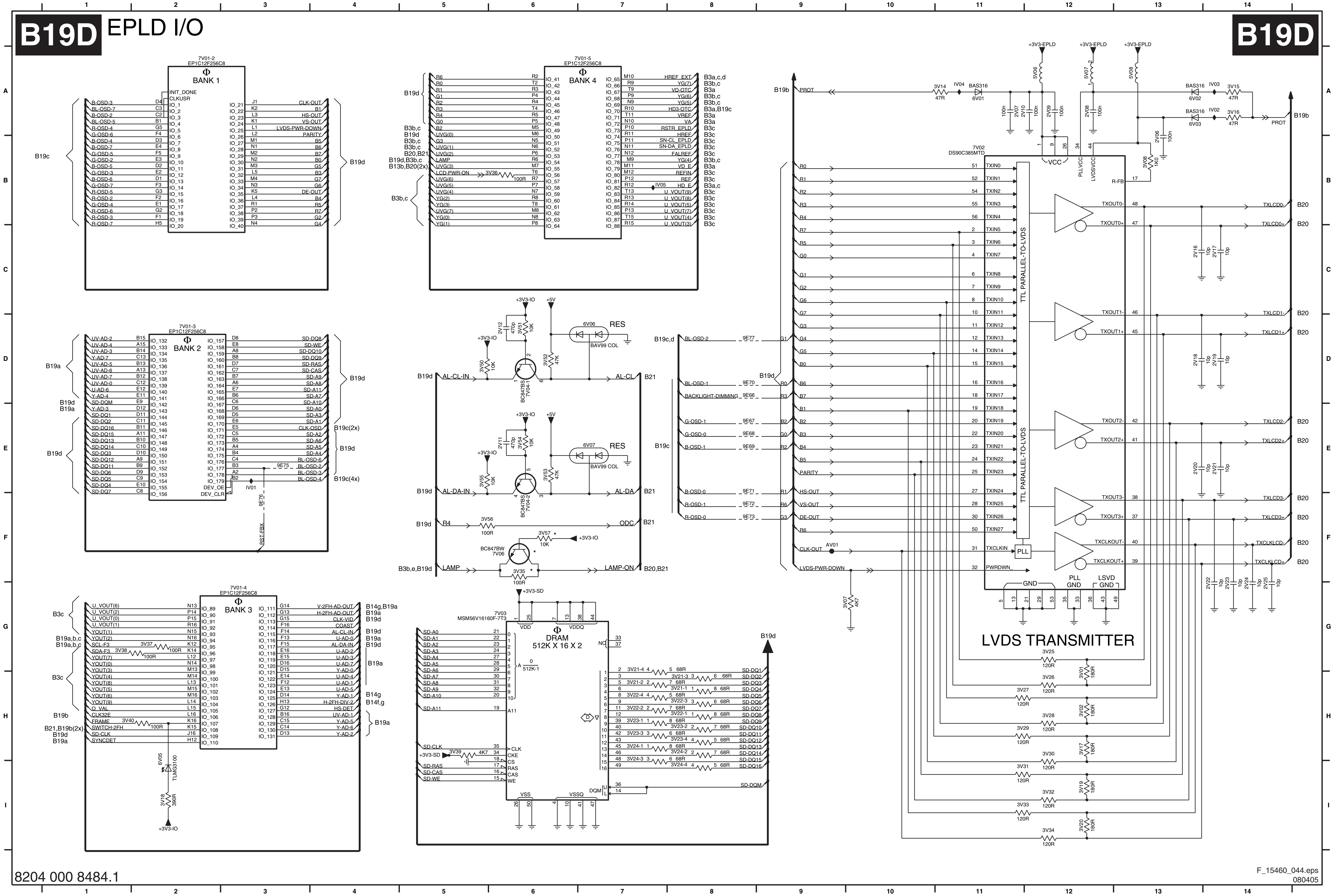
1E02	B9
1E04	G6
2D03	E5
2D04	F3
2D09	G3
2D10	G3
2D11	G3
2D12	G3
2D15	I5
2E01	G4
2E03	G4
2E06	G4
2E41	F5
2E42	F6
2E43	F4
2E49	E3
2E50	E3
2E51	E2
2E52	G8
2E54	G4
2E55	H4
2E56	H4
2E57	H4
2E58	H4
2E59	H4
2E62	H3
2E65	H3
2E66	H3
2E67	H3
2E68	I4
2E69	I4
2E70	I4
2E71	I4
2E72	I3
2E73	I3
2E74	I3
2E75	I3
2E77	I2
2E78	I2
2E79	F5
2E80	F5
2E81	I2
2E82	G3
2E83	G4
2E84	B1
2E86	E2
2E87	E6
2E88	A8
2E89	B8
2E90	B8
2E91	C8
2E92	B9
2E93	G12
2E94	E12
2E95	I12
2E96	B4
2E97	C4
2E98	C4
2E99	F6
3E00	B2
3E01	B4
3E02	C4
3E03	D4
3E20	F11
3E21	H11
3E50	B4
3E51	B4
3E52	B4
3E53	B7
3E54	G5
3E55	E2
3E56	E2
3E57	E2
3E58	G5
3E59	B3
3E60	A8
3E61	E6
3E62	D5
3E63	B7
3E64	B3
3E69	H8
3E70	H9
3E73	B6
3E74	I5
3E77	A8
3E78	A8
3E79	B8
3E80	C8
3E81	E12
3E82	F12
3E83	F11
3E84	G10
3E85	G12
3E86	G11
3E87	I11
3E88	H5
3E89	I5
5E50	H5
5E51	I5
5E52	G5
5E53	D6
5E54	F5
5E55	E11
5E56	H11
5E58	G8
6E51	E5
6E52	G5
6E53	G5
6E54	I5
6E55	H5
6E56	E12
7E01	E5
7E02	B2
7E03	F11
7E04	G11
7E05	D3
7E06	I12
7E10	H8
7E12-1	F3
7E12-2	E2
7E25	C3
7E26	B3
7E27	C3
7V01-1	B5
7V01-6	A12
9E57	I8
9E58	I8
9E59	E5
9E60	C7
9E61	D7
9E62	C7
9E63	C7
9E64	C7
9E65	D7
FE05	F5
FE50	I10
FE51	B8
FE52	A9
FE53	C7
FE54	C9
FE55	B8
FE56	D6
FE57	H4
FE58	I4
FE59	G3
FE60	F3
FE61	E3
FE66	B9
FE67	E2
IE20	B4
IE21	C3
IE22	B3
IE23	C4
IE24	C4
IE25	C3
IE26	E2
IE27	E2
IE29	G5
IE30	H5
IE31	I5
IE32	G5
IE33	E12
IE34	C3
IE35	C4
IE36	B4
IE37	E5

SSB: EPLD OSD


B19C
EPLD OSD
A/D CONVERTER
7E24
AD9283BRS-50
8-BIT
ADC
AIN+
AIN-
PWRDWN
ENCODE
VREFOUT
VREFIN
DATA
GND
VD
VDD
BACKLIGHT-DIMMING
BL-OSD-1
BL-OSD-2
BL-OSD-3
BL-OSD-4
BL-OSD-5
BL-OSD-6
BL-OSD-7
B3a
BL-OSD
B19c
CLK-BL
7E22
BC847BW
+3V3-AD
VBL
VDO
VDDO
PVDO
FL01
5E00
5E01
5E02
5E03
IL01
IL02
IL03
7E23
AD9883AKST
VDD
VD
PVD
R-OSD
G-OSD
B-OSD
HD3-OTC
VD-OTC
RAIN
GAIN
BAIN
MIDSCV
HSYNC
VSYNC
SOGIN
CLAMP
COAST
FILT
SDA
SCL
A0
CLAMP
A/D
SYNC
PROCESSING
AND CLOCK
GENERATION
SERIAL REGISTER
AND
PWR MANAGMENT
REF
REF-BYPASS
ROUTA0
ROUTA1
ROUTA2
ROUTA3
ROUTA4
ROUTA5
ROUTA6
ROUTA7
GOUTA0
GOUTA1
GOUTA2
GOUTA3
GOUTA4
GOUTA5
GOUTA6
GOUTA7
BOUTA0
BOUTA1
BOUTA2
BOUTA3
BOUTA4
BOUTA5
BOUTA6
BOUTA7
R-OSD-0
R-OSD-1
R-OSD-2
R-OSD-3
R-OSD-4
R-OSD-5
R-OSD-6
R-OSD-7
G-OSD-0
G-OSD-1
G-OSD-2
G-OSD-3
G-OSD-4
G-OSD-5
G-OSD-6
G-OSD-7
B-OSD-0
B-OSD-1
B-OSD-2
B-OSD-3
B-OSD-4
B-OSD-5
B-OSD-6
B-OSD-7
B19d
HSOUT
VSOUT
SOGOUT
DATACK
3E91
33R
AL10
B19c,d
CLK-OSD
CLK-BL
B19a,b,d
SDA-F3
SCL-F3
FE01
FE03
FE04
IE00
IE01
IE03
IE04
IE05
IL05
3E06 100R
3E07 100R
3E08 100R
2E21 47n
2E23 47n
2E25 47n
2E22 22p
2E24 22p
2E26 22p
2E27 100n
2E53 10p
3E11 470R
3E12 470R
3E14 1K0
2E48 10p
2E28 47n
2E29 33n
3E16 2K7
2E30 4n7
2E34 3n3
3E18 100R
3E19 100R
2E35 100n
3E37 100R
2E39 10p
3E05 1K5
3E04 1K0
3E90 68R
2E02 100n
2E04 100n
3E09 100R
3E10 33R
3E13 1K0
3E15 100R
2E32 10p
9E74 RES
9E78
GND
8204 000 8484.1
F_15460_043.eps
080405

2E02	D1
2E04	D2
2E05	B4
2E07	A5
2E08	C5
2E09	A6
2E10	B5
2E11	B6
2E12	B6
2E13	B6
2E14	B6
2E15	B6
2E16	B5
2E17	B6
2E18	B6
2E19	B6
2E20	C6
2E21	D8
2E22	D7
2E23	E8
2E24	E7
2E25	F7
2E26	G7
2E27	G7
2E28	H4
2E29	H4
2E30	H4
2E32	F1
2E34	H4
2E35	I12
2E39	B1
2E48	G6
2E53	G6
3E04	D1
3E05	C1
3E06	D6
3E07	E6
3E08	F6
3E09	E1
3E10	E2
3E11	G6
3E12	G6
3E13	E1
3E14	G7
3E15	F1
3E16	H5
3E18	H7
3E19	H7
3E37	B1
3E90	D1
3E91	H12
5E00	A5
5E01	A5
5E02	B5
5E03	C5
7E22	E1
7E23	C8
7E24	B2
9E74	E2
9E78	B3
AL10	H12
FE01	G6
FE03	G6
FE04	H12
FL01	A4
IE00	H4
IE01	H5
IE03	E1
IE04	E2
IE05	F2
IL01	A7
IL02	B7
IL03	C7
IL05	G8

SSB: EPLD I/O


B19D
EPLD I/O
B19D
7V01-2
EP1C12F256C8
BANK 1
7V01-5
EP1C12F256C8
BANK 4
7V01-3
EP1C12F256C8
BANK 2
7V01-4
EP1C12F256C8
BANK 3
7V03
MSM56V16160F-7T3
DRAM
512K X 16 X 2
7V02
DS90C385MTD
TTL PARALLEL-TO-LVDS
LVDS TRANSMITTER
PLL
VCC
GND
PLL GND
LSVD GND
+3V3-EPLD
+3V3-IO
+5V
+3V3-SD
RES
BAV99 COL
BC847BW
AL-CL-IN
AL-CL
AL-DA-IN
AL-DA
ODC
LAMP
LAMP-ON
PROT
LVDS-PWR-DOWN
TXOUT0-
TXOUT0+
TXOUT1-
TXOUT1+
TXOUT2-
TXOUT2+
TXOUT3-
TXOUT3+
TXCLKOUT-
TXCLKOUT+
TXLCD0-
TXLCD0+
TXLCD1-
TXLCD1+
TXLCD2-
TXLCD2+
TXLCD3-
TXLCD3+
TXCLKLCD-
TXCLKLCD+
B19a
B19b
B19c
B19d
B20
B21
B3a,c,d
B3b,c
B3c
B14g,B19a
1
2
3
4
5
6
7
8
9
10
11
12
13
14
A
B
C
D
E
F
G
H
I

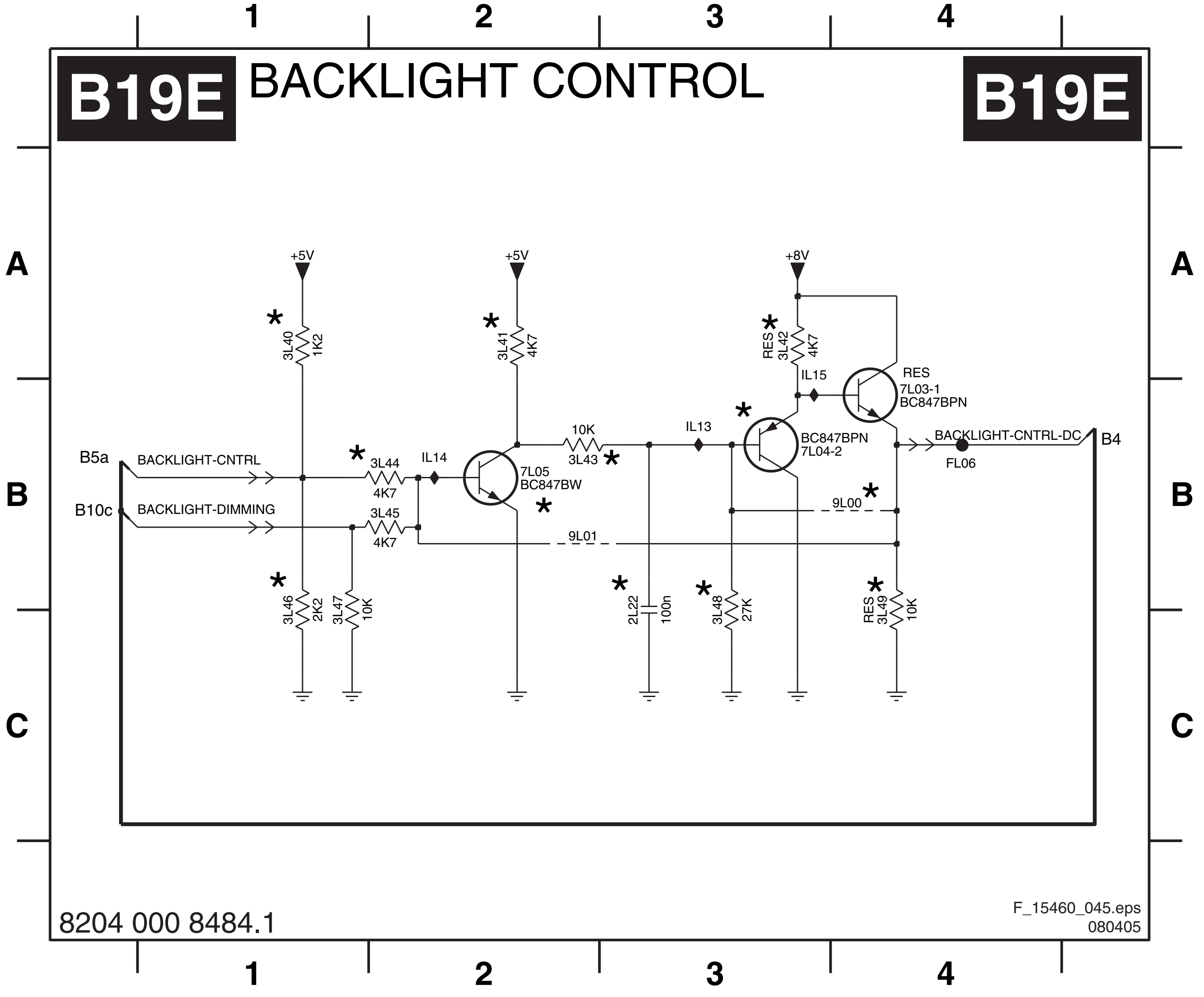
8204 000 8484.1

F_15460_044.eps
080405

2V06	B13
2V07	A11
2V08	A12
2V09	A12
2V10	A12
2V11	E6
2V12	D6
2V16	C13
2V17	C14
2V18	D13
2V19	D14
2V20	E13
2V21	E14
2V22	G14
2V23	G14
2V24	G14
2V25	G14
3V01	H12
3V02	H12
3V07	G10
3V08	B13
3V14	A11
3V15	A14
3V16	A14
3V17	H12
3V18	I2
3V19	I12
3V20	I12
3V21-1	H8
3V21-2	H7
3V21-3	H8
3V21-4	G7
3V22-1	H8
3V22-2	H7
3V22-3	H8
3V22-4	H7
3V23-1	H7
3V23-2	H8
3V23-3	H7
3V23-4	H8
3V24-1	H7
3V24-2	H8
3V24-3	H7
3V24-4	I8
3V25	G12
3V26	H12
3V27	H11
3V28	H12
3V29	H11
3V30	H12
3V31	I11
3V32	I12
3V33	I11
3V34	I12
3V35	F6
3V36	B6
3V37	G2
3V38	G1
3V39	H5
3V40	H1
3V50	D5
3V51	D6
3V52	D6
3V53	E6
3V54	E6
3V55	E5
3V56	F5
3V57	F6
5V06	A12
5V07	A12
5V08	A13
6V01	A11
6V02	A13
6V03	A13
6V05	I2
6V06	D7
6V07	E7
7V01-2	A2
7V01-3	D2
7V01-4	G3
7V01-5	A7
7V02	B11
7V03	G6
7V04-1	D6
7V04-2	F6
7V06	F6
9E66	D8
9E67	E8
9E68	E8
9E69	E8
9E70	D8
9E71	E8
9E72	F8
9E73	F8
9E75	E3
9E76	F3
9E77	D8
AV01	F9
IV01	E3
IV02	A14
IV03	A14
IV04	A11
IV05	B7

SSB: Backlight Control

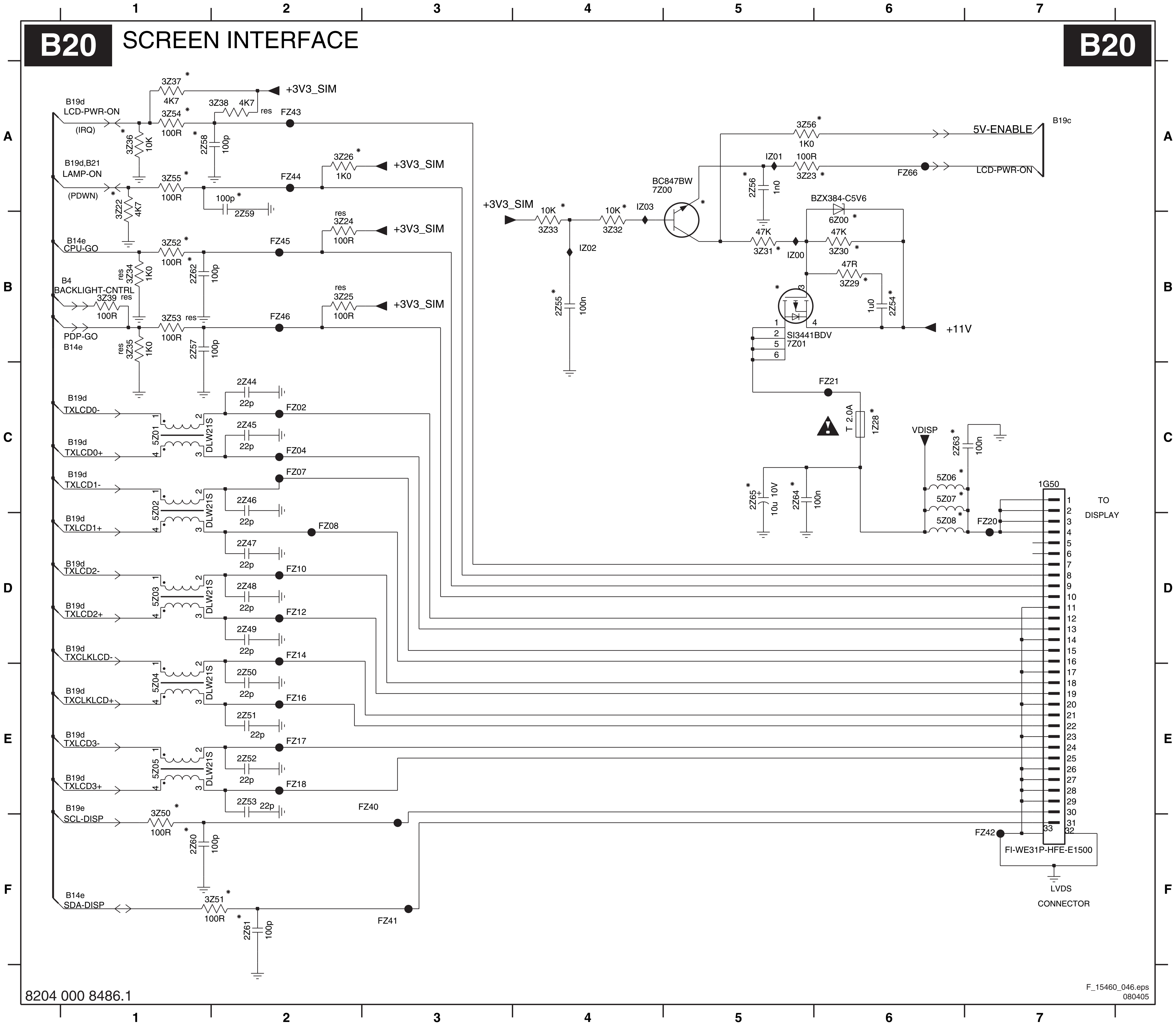
2L22 B3
3L40 A1
3L41 A2
3L42 A3
3L43 B2
3L44 B2
3L45 B2
3L46 B1
3L47 B1
3L48 B3
3L49 B4
7L03-1 B4
7L04-2 B3
7L05 B2
9L00 B4
9L01 B2
FL06 B4
IL13 B3
IL14 B2
IL15 A3


B19E
BACKLIGHT CONTROL
B19E
1
2
3
4
A
B
C
+5V
+5V
+8V
3L40
1K2
3L41
4K7
RES
3L42
4K7
IL15
RES
7L03-1
BC847BPN
IL13
BC847BPN
7L04-2
10K
3L43
B5a
BACKLIGHT-CNTRL
3L44
4K7
IL14
7L05
BC847BW
B10c
BACKLIGHT-DIMMING
3L45
4K7
9L01
9L00
BACKLIGHT-CNTRL-DC
B4
FL06
3L46
2K2
3L47
10K
2L22
100n
3L48
27K
RES
3L49
10K
8204 000 8484.1
F_15460_045.eps
080405

Personal Notes:

E_06532_012.eps
131004

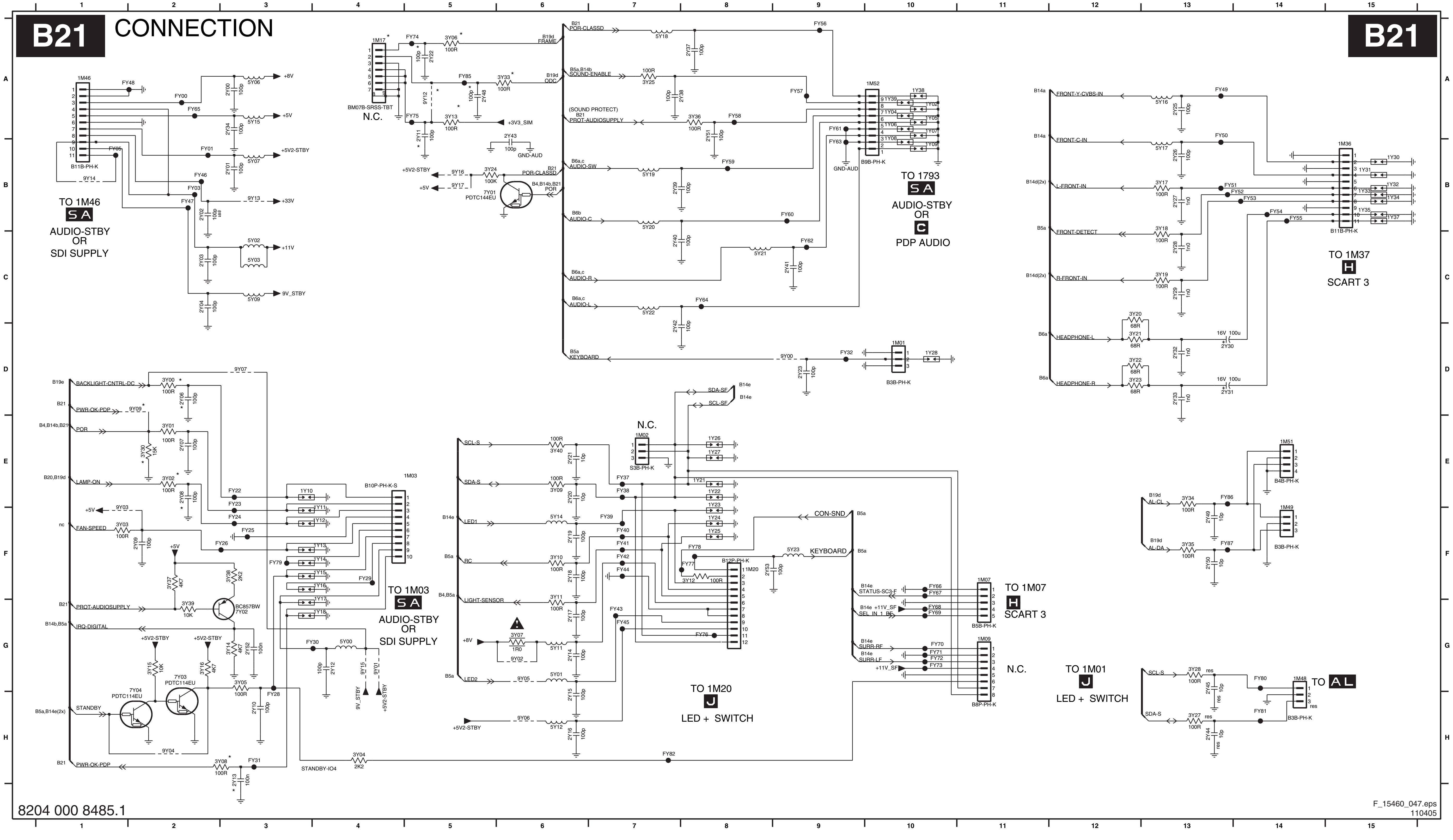
SSB: Screen Interface


B20
SCREEN INTERFACE
B20
1 2 3 4 5 6 7
A B C D E F
B19d
LCD-PWR-ON
(IRQ)
3Z37 4K7
3Z54 100R
3Z38 4K7 res
+3V3_SIM
FZ43
3Z36 10K
2Z58 100p
B19d,B21
LAMP-ON
(PDWN)
3Z55 100R
3Z26 1K0
+3V3_SIM
FZ44
100p 2Z59
3Z22 4K7
B14e
CPU-GO
3Z52 100R
FZ45
3Z24 100R res
+3V3_SIM
3Z34 1K0 res
2Z62 100p
B4
BACKLIGHT-CNTRL
3Z39 100R res
3Z53 100R res
FZ46
3Z25 100R res
+3V3_SIM
PDP-GO
B14e
3Z35 1K0 res
2Z57 100p
B19d TXLCD0-
B19d TXLCD0+
5Z01 DLW21S
2Z44 22p
FZ02
2Z45 22p
FZ04
B19d TXLCD1-
B19d TXLCD1+
5Z02 DLW21S
FZ07
2Z46 22p
FZ08
2Z47 22p
B19d TXLCD2-
B19d TXLCD2+
5Z03 DLW21S
FZ10
2Z48 22p
FZ12
2Z49 22p
B19d TXCLKLCD-
B19d TXCLKLCD+
5Z04 DLW21S
FZ14
2Z50 22p
FZ16
2Z51 22p
B19d TXLCD3-
B19d TXLCD3+
5Z05 DLW21S
FZ17
2Z52 22p
FZ18
2Z53 22p
B19e
SCL-DISP
3Z50 100R
2Z60 100p
FZ40
B14e
SDA-DISP
3Z51 100R
2Z61 100p
FZ41
+3V3_SIM
10K 3Z33
10K 3Z32
IZ03
IZ02
2Z55 100n
BC847BW
7Z00
3Z56 1K0
B19c
5V-ENABLE
IZ01
100R 3Z23
2Z56 1n0
FZ66
LCD-PWR-ON
BZX384-C5V6
6Z00
47K 3Z31
IZ00
47K 3Z30
47R 3Z29
1u0
2Z54
+11V
SI3441BDV
7Z01
FZ21
T 2.0A
1Z28
VDISP
2Z63 100n
5Z06
5Z07
5Z08
FZ20
2Z65 10u 10V
2Z64 100n
1G50
TO DISPLAY
FI-WE31P-HFE-E1500
FZ42
LVDS CONNECTOR
8204 000 8486.1
F_15460_046.eps 080405

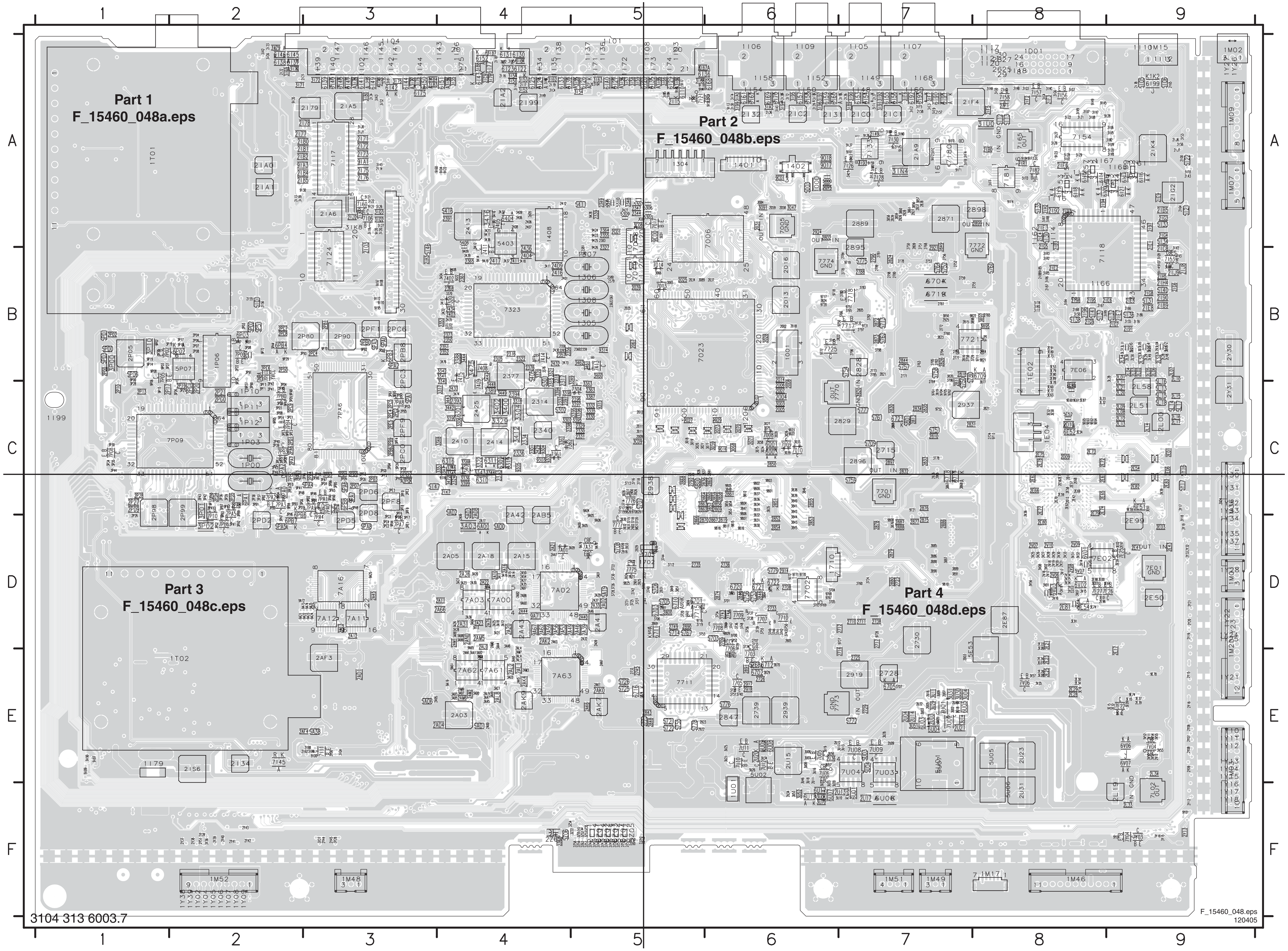
1G50	C7
2Z44	C2
2Z45	C2
2Z46	C2
2Z47	D2
2Z48	D2
2Z49	D2
2Z50	E2
2Z51	E2
2Z52	E2
2Z53	E2
2Z54	B6
2Z55	B4
2Z56	A5
2Z57	B1
2Z58	A1
2Z59	A2
2Z60	F1
2Z61	F2
2Z62	B1
2Z63	C6
2Z64	C5
2Z65	C5
3Z22	A1
3Z23	A5
3Z24	B2
3Z25	B2
3Z26	A2
3Z28	C6
3Z29	B6
3Z30	B6
3Z31	B5
3Z32	B4
3Z33	B4
3Z34	B1
3Z35	B1
3Z36	A1
3Z37	A1
3Z38	A2
3Z39	B1
3Z50	F1
3Z51	F2
3Z52	B1
3Z53	B1
3Z54	A1
3Z55	A1
3Z56	A5
5Z01	C1
5Z02	C1
5Z03	D1
5Z04	E1
5Z05	E1
5Z06	C6
5Z07	C6
5Z08	D6
6Z00	B6
7Z00	A4
7Z01	B5
FZ02	C2
FZ04	C2
FZ07	C2
FZ08	D2
FZ10	D2
FZ12	D2
FZ14	D2
FZ16	E2
FZ17	E2
FZ18	E2
FZ20	D7
FZ21	C6
FZ40	E3
FZ41	F3
FZ42	F7
FZ43	A2
FZ44	A2
FZ45	B2
FZ46	B2
FZ66	A6
IZ00	B5
IZ01	A5
IZ02	B4
IZ03	A4

SSB: Connection

1M01	D10
1M02	E7
1M03	E5
1M07	F10
1M09	G10
1M17	A4
1M20	F8
1M36	B15
1M46	A1
1M48	G14
1M49	F14
1M51	E14
1M52	A10
1Y02	A10
1Y04	A10
1Y05	A10
1Y06	A10
1Y07	A10
1Y08	A10
1Y09	B10
1Y10	E3
1Y11	E4
1Y12	F4
1Y13	F4
1Y14	F4
1Y15	F4
1Y16	F4
1Y17	F4
1Y18	G4
1Y21	E8
1Y22	E8
1Y23	E8
1Y24	F8
1Y25	F8
1Y26	E8
1Y27	E8
1Y28	D10
1Y30	B15
1Y31	B15
1Y32	B15
1Y33	B15
1Y34	B15
1Y35	B15
1Y37	B15
1Y38	A10
1Y39	A10
2Y00	A3
2Y01	B3
2Y02	B2
2Y03	C3
2Y04	C3
2Y06	D2
2Y07	E2
2Y08	E2
2Y09	F2
2Y10	H3
2Y11	A5
2Y12	G4
2Y13	H3
2Y14	G6
2Y15	H6
2Y16	H6
2Y17	G6
2Y18	F6
2Y19	F6
2Y20	E6
2Y21	E6
2Y22	A5
2Y23	D9
2Y25	A13
2Y26	B13
2Y27	B13
2Y28	C13
2Y29	C13
2Y30	D13
2Y31	D13
2Y32	D13
2Y33	D13
2Y34	A3
2Y37	A8
2Y38	A7
2Y39	B7
2Y40	C7
2Y41	C9
2Y42	D7
2Y43	A6
2Y44	H13
2Y45	G13
2Y48	A5
2Y49	F13
2Y50	F13
2Y51	A8
2Y52	G3
2Y53	F9
3Y00	D2
3Y01	E2
3Y02	E2
3Y03	F1
3Y04	H4
3Y05	G3
3Y06	A5
3Y07	G6
3Y08	H3
3Y09	E6
3Y10	F6
3Y11	F6
3Y12	F8
3Y13	A5
3Y14	G3
3Y15	G2
3Y16	G2
3Y17	B13
3Y18	B13
3Y19	C13
3Y20	C12
3Y21	D12
3Y22	D12
3Y23	D12
3Y24	B5
3Y25	A7
3Y27	H13
3Y28	G13
3Y30	E2
3Y33	A6
3Y34	E13
3Y35	F13
3Y36	A8
3Y37	F2
3Y38	F3
3Y39	G2
3Y40	E6
5Y00	G4
5Y01	G6
5Y02	C3
5Y03	C3
5Y06	A3
5Y07	B3
5Y09	C3
5Y11	G6
5Y12	H6
5Y14	F6
5Y15	A3
5Y16	A13
5Y17	B13
5Y18	A7
5Y19	B7
5Y20	B7
5Y21	C8
5Y22	C7
5Y23	F9
7Y01	B5
7Y02	G3
7Y03	G2
7Y04	H2
9Y00	D9
9Y01	G4
9Y02	G6
9Y03	F1
9Y04	H2
9Y05	G6
9Y06	H6
9Y07	D3
9Y09	D2
9Y12	A5
9Y13	B3
9Y14	B1
9Y15	G4
9Y16	B5
9Y17	B5
FY00	A2
FY01	B2
FY03	B2
FY05	B1
FY22	E3
FY23	E3
FY24	F3
FY25	F3
FY26	F3
FY28	H3
FY29	F4
FY30	G4
FY31	H3
FY32	D9
FY37	E7
FY38	E7
FY39	F7
FY40	F7
FY41	F7
FY42	F7
FY43	G7
FY44	F7
FY45	G7
FY46	B2
FY47	B2
FY48	A2
FY49	A13
FY50	A13
FY51	B13
FY52	B14
FY53	B14
FY54	B14
FY55	B14
FY56	A9
FY57	A9
FY58	A8
FY59	B8
FY60	B9
FY61	C7
FY62	C9
FY63	C8
FY64	C8
FY65	A2
FY66	F10
FY67	F9
FY68	G9
FY69	G9
FY70	G9
FY71	G9
FY72	G9
FY73	G9
FY74	A5
FY75	A5
FY76	G8
FY77	F8
FY78	F8
FY79	F3
FY80	G14
FY81	H14
FY82	H7
FY85	A5
FY86	E13
FY87	F13


B21
CONNECTION
B21
TO 1M46
SA
AUDIO-STBY
OR
SDI SUPPLY
N.C.
TO 1793
SA
AUDIO-STBY
OR
C
PDP AUDIO
TO 1M37
H
SCART 3
TO 1M03
SA
AUDIO-STBY
OR
SDI SUPPLY
N.C.
TO 1M20
J
LED + SWITCH
TO 1M07
H
SCART 3
N.C.
TO 1M01
J
LED + SWITCH
TO AL
POR-CLASSD
FRAME
SOUND-ENABLE
ODC
(SOUND PROTECT)
PROT-AUDIOSUPPLY
AUDIO-SW
AUDIO-C
AUDIO-R
AUDIO-L
KEYBOARD
FRONT-Y-CVBS-IN
FRONT-C-IN
L-FRONT-IN
FRONT-DETECT
R-FRONT-IN
HEADPHONE-L
HEADPHONE-R
BACKLIGHT-CNTRL-DC
PWR-OK-PDP
POR
LAMP-ON
FAN-SPEED
PROT-AUDIOSUPPLY
IRQ-DIGITAL
STANDBY
PWR-OK-PDP
STANDBY-IO4
SCL-S
SDA-S
LED1
RC
LIGHT-SENSOR
LED2
SDA-SF
SCL-SF
CON-SND
KEYBOARD
STATUS-SC3-F
SEL_IN_1_RF
SURR-RF
SURR-LF
AL-CL
AL-DA
SCL-S
SDA-S
+8V
+5V
+5V2-STBY
+33V
+11V
9V_STBY
+3V3_SIM
GND-AUD
8204 000 8485.1
F_15460_047.eps
110405

Layout SSB (Top Side Overview)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B
C
D
E
F
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Part 2
F_15460_048b.eps
Part 3
F_15460_048c.eps
Part 4
F_15460_048d.eps
3104 313 6003.7
F_15460_048.eps
120405

Layout SSB Mapping (Top Side)

1000	A6
1001	B6
1304	A5
1305	B5
1306	B4
1307	B5
1308	B4
1401	A6
1402	A6
1408	A4
1702	D5
1703	D5
1710	D7
1D01	A8
1E02	B8
1E04	C8
1I01	A5
1I04	A4
1I05	A7
1I07	A7
1I09	A6
1I11	B3
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1I56	A9
1I57	A8
1I59	A9
1I79	E1
1M01	D9
1M02	A9
1M03	E9
1M07	A9
1M09	A9
1M15	A9
1M17	F8
1M20	D9
1M36	C9
1M46	F8
1M48	F3
1M49	F7
1M51	F7
1M52	F2
1P00	C2
1P03	C2
1P06	B2
1P10	C2
1P11	C2
1P12	C2
1T01	A2
1T02	E2
1U01	F6
2002	B6
2004	C6
2005	C6
2006	C6
2007	C6
2008	C6
2009	C5
2011	C5
2012	C5
2013	B6
2014	B6
2016	B6
2018	B6
2020	C6
2025	B5
2027	C5
2028	B6
2029	C6
2031	A6
2034	B5
2035	B5
2037	B6
2039	B5
2058	A6
2059	A6
2067	B5
2070	C6
2071	C6
2073	C6
2075	A6
2301	C4
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2317	B4
2318	B4
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2332	C4
2333	C4
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2348	A5
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2408	A4
2409	B4
2410	C4
2411	B4
2412	A4
2413	A4
2414	C4
2416	B4
2417	B4
2425	C4
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2429	C4
2430	B4
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2723	D7
2724	C8
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2744	D6
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2839	A7
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3412	C4
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3704	D6
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3865	D6
3867	C7
3868	C7
3869	D5
3870	E6
3874	E5
3875	D6
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3885	D7
3886	D7
3887	D7
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3889	D7
3890	D7
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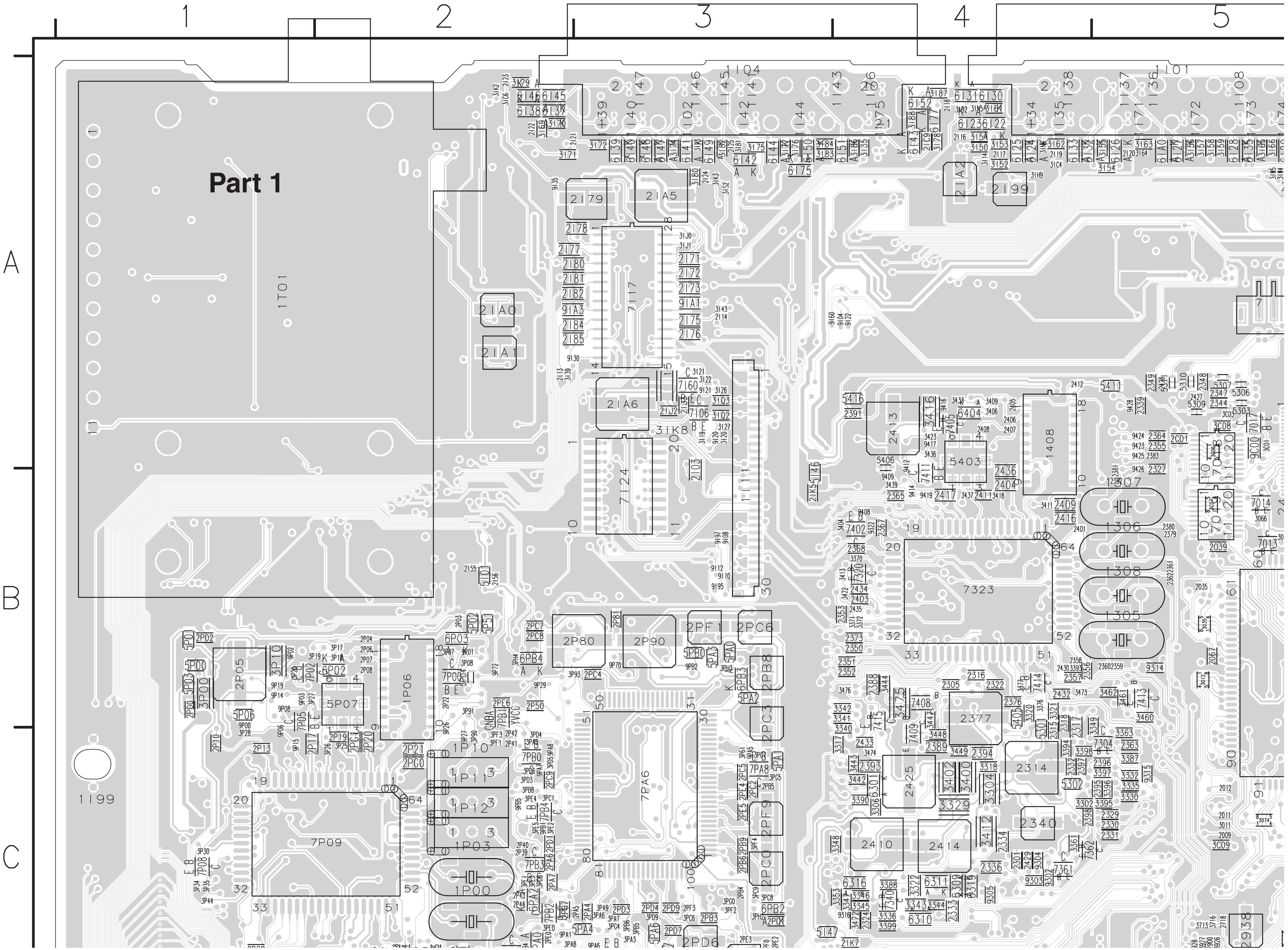
Layout SSB (Top Side Part 1)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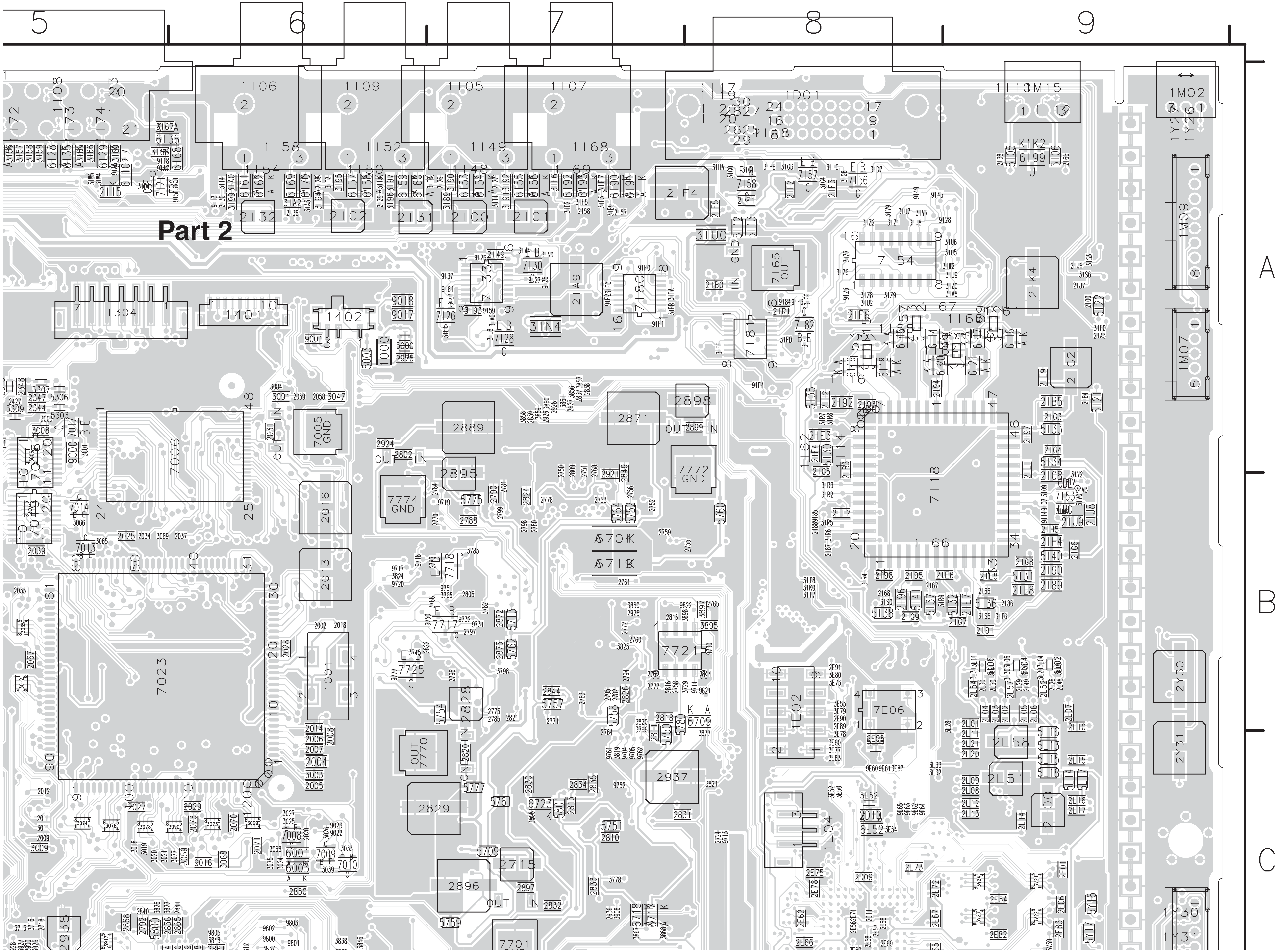
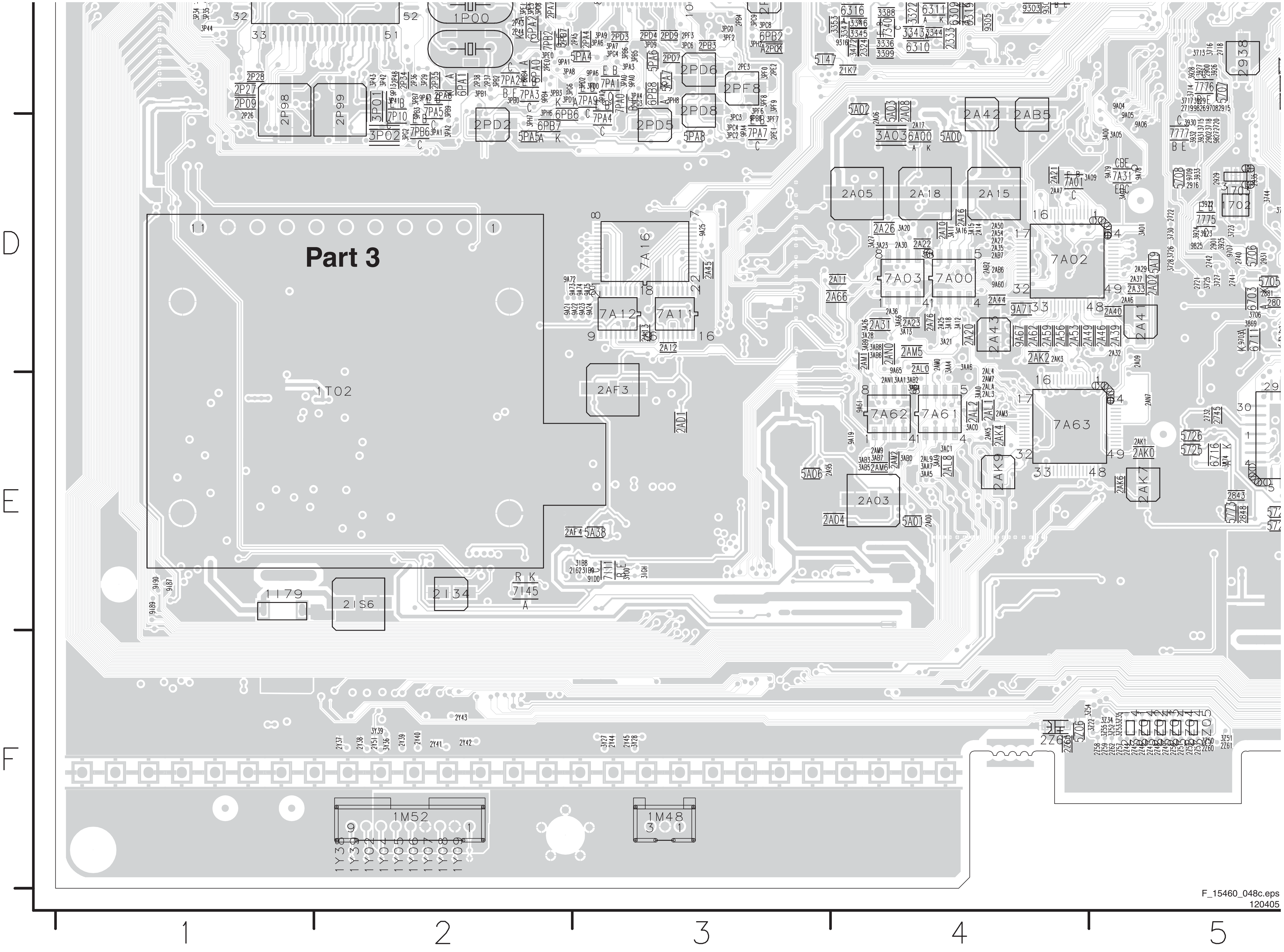
Layout SSB (Top Side Part 2)


5
6
7
8
9
A
B
C
Part 2
1106
1109
1105
1107
1D01
1M02
1M09
1M07
1304
1401
1402
7006
7023
7118
7154
7165
2889
2871
2898
2895
7772
7774
7770
2829
2937
2896
2715
7701
1E02
1E04
7E06
2Y30
2Y31
1Y30
1Y31

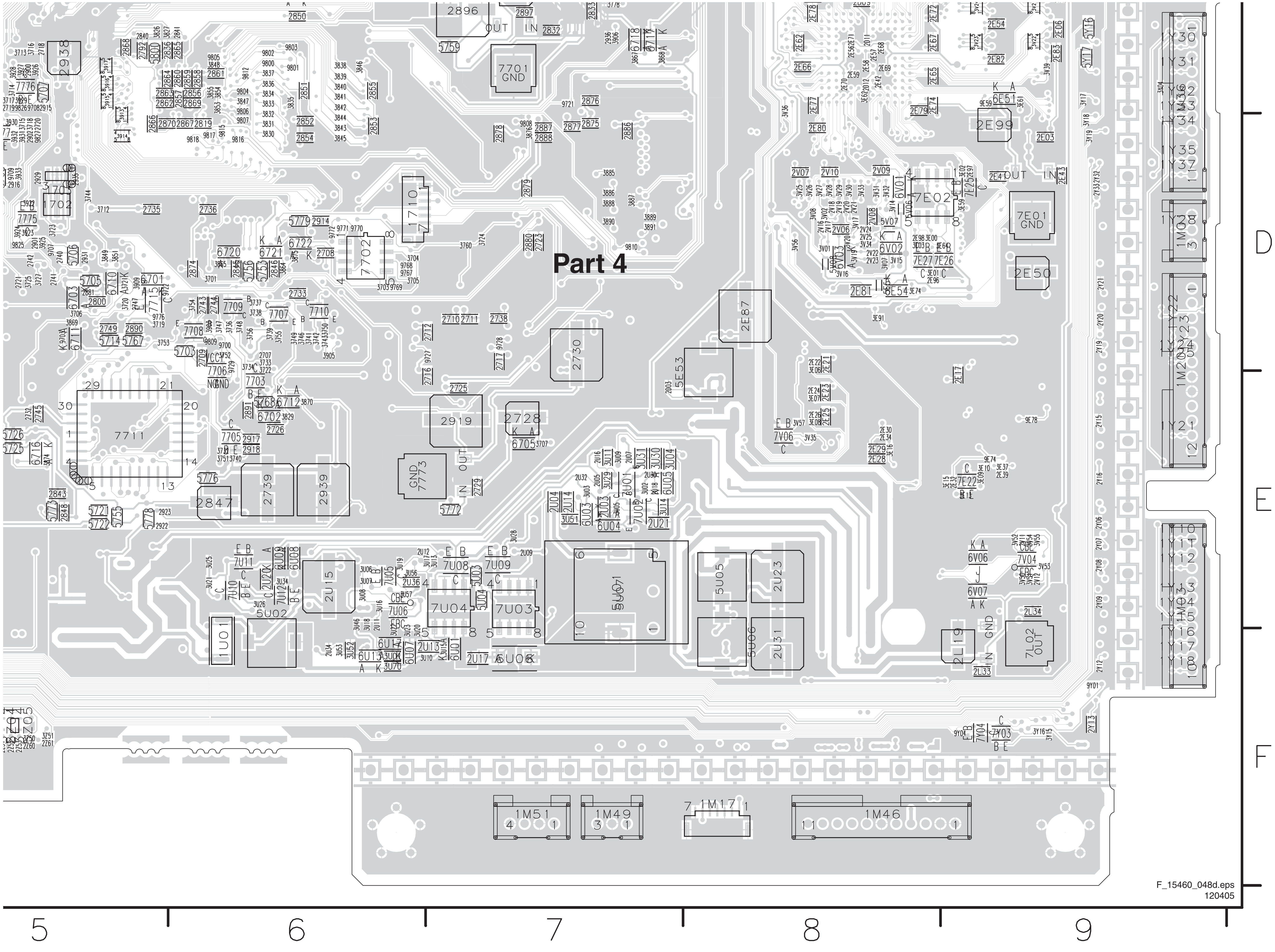
F_15460_048b.eps
120405

Layout SSB (Top Side Part 3)

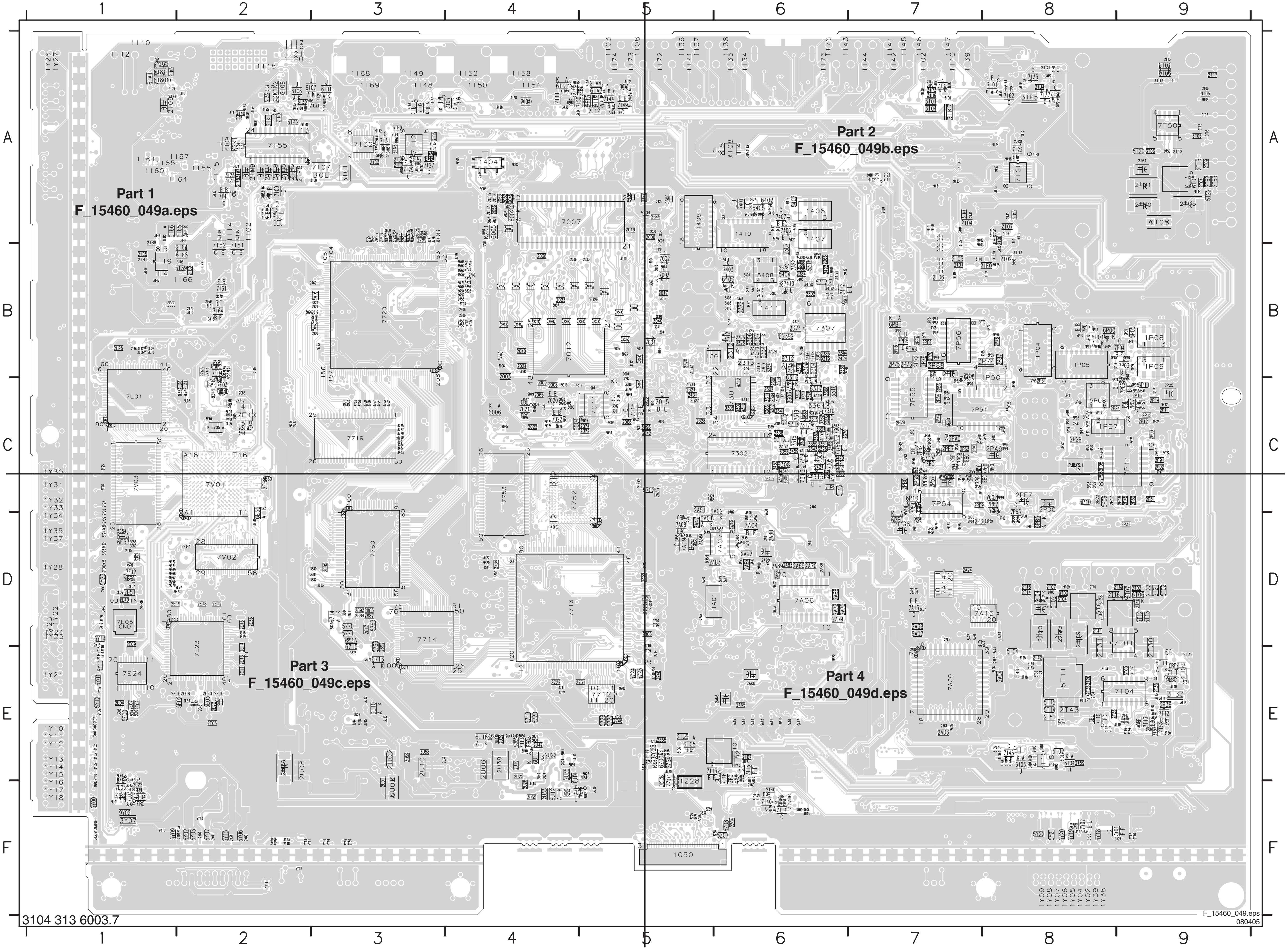

D
E
F
1
2
3
4
5
Part 3
1T02
1P00
2P98
2P99
2PD2
2PD5
2PD6
2PD8
2PF8
7A16
7A12
7A11
2AF3
2A05
2A18
2A15
2A42
2AB5
7A03
7A00
7A02
2A43
2A41
7A62
7A61
7A63
2A03
2AK9
2AK7
1702
2938
1179
21S6
2134
7145
1M52
1M48
1Y30
1Y39
1Y02
1Y04
1Y05
1Y06
1Y07
1Y08
1Y09
2Z60

F_15460_048c.eps
120405

Layout SSB (Top Side Part 4)


Part 4
D
E
F
5
6
7
8
9
7711
7702
7701 GND
7E01 GND
1M51
1M49
1M17
1M46
F_15460_048d.eps
120405

Layout SSB (Overview Bottom Side)


1
2
3
4
5
6
7
8
9
A
B
C
D
E
F
Part 1
F_15460_049a.eps
Part 2
F_15460_049b.eps
Part 3
F_15460_049c.eps
Part 4
F_15460_049d.eps
7155
7007
7720
7012
7719
7L01
7V01
7V03
7V02
7753
7752
7760
7713
7714
7E23
7E24
7E05
1409
1410
1406
1407
7307
7302
7A06
7A30
7P56
7P55
7P51
7P54
1P04
1P05
1P07
1P08
1P09
7P11
7T50
7T04
5T11
1G50
1Z28
3104 313 6003.7
F_15460_049.eps
080405

Layout SSB Mapping (Bottom Side)

1301	B5	2804	D5	2I33	E8	2PA0	C7	2Y49	F3	3357	C6	3902	C3	3IA5	A8	3IW8	A2	3T04	D8	3Z37	F5	6I04	E8	7I09	A2	9418	A6	9IB1	A7
1404	A4	2806	D5	2I37	F6	2PA1	C7	2Y50	F3	3358	C6	3911	B3	3IA6	A3	3IW9	A6	3T05	A9	3Z38	F6	6I05	E5	7I10	E8	9420	A6	9IB2	A7
1406	A6	2807	D5	2I39	A5	2PA2	C7	2Y52	F8	3359	C6	3912	B3	3IA7	A3	3IZ3	A2	3T06	A9	3Z39	F5	6I06	A2	7I12	A3	9421	C6	9IB3	A2
1407	A6	2808	B4	2I40	F6	2PA3	C7	2Y53	D1	3360	C6	3918	B3	3IA8	A4	3IZ4	A2	3T10	E9	3Z56	E5	6I07	A3	7I13	E5	9422	B6	9ID1	A3
1409	A5	2812	B3	2I46	A2	2PA9	C8	2Z54	E5	3362	C6	3919	B3	3IA9	A4	3IZ5	A2	3T11	E9	5304	A5	6I08	A2	7I14	F6	9427	B6	9ID2	A3
1410	B6	2817	D3	2I47	A5	2PB0	C7	2Z55	E5	3364	C6	3921	B3	3IB0	A3	3L02	B1	3T12	E9	5305	A5	6I09	A2	7I15	E6	9701	E5	9ID3	A2
1411	B6	2823	A3	2I48	E6	2PB1	C7	2Z56	E5	3365	C6	3A02	D7	3IB1	E8	3L03	C2	3T13	E9	5308	A5	6I11	A4	7I16	E6	9702	E5	9ID4	A2
1A01	D5	2825	A3	2I50	A3	2PB2	C7	2Z64	F6	3366	C6	3A04	D5	3IB3	E8	3L06	C2	3T14	E9	5312	B6	6I12	A5	7I19	B1	9706	D5	9ID5	A2
1G50	F5	2827	A3	2I52	E5	2PD0	C8	3001	C5	3367	C6	3A06	D6	3IB4	A2	3L08	C2	3T15	E9	5313	C6	6I13	A5	7I20	A8	9710	D5	9ID6	A2
1P04	B8	2882	D3	2I59	E8	2PE7	C7	3002	C5	3369	C6	3A17	D6	3IB5	A2	3L12	B1	3T16	E8	5314	C6	6I63	B2	7I22	A8	9712	B4	9ID7	A2
1P05	C8	2883	D3	2I60	F6	2PE8	C7	3004	B5	3378	B6	3A19	D6	3IB6	E8	3L40	F1	3T17	E8	5315	C6	6I64	A2	7I23	A2	9714	C2	9ID8	A2
1P07	C8	2884	D3	2I69	B2	2PE9	C7	3005	B5	3380	B6	3A22	D5	3IB7	E8	3L41	F1	3T18	E8	5318	B6	6I65	A1	7I27	A3	9715	B4	9ID9	A2
1P08	B9	2885	D3	2I70	B2	2PF2	B7	3006	B4	3382	B6	3A24	C5	3IBA	E8	3L42	F1	3T19	E8	5401	B6	6I66	A2	7I29	A3	9716	B4	9L00	F1
1P09	C9	2892	E3	2IA4	A5	2PF5	B7	3007	B4	3383	C6	3A40	D6	3IBB	E8	3L43	F1	3T20	E9	5402	A6	6I80	A1	7I31	A3	9723	B3	9L01	F1
1Z28	E5	2893	D3	2IB7	E6	2PF6	B7	3008	B5	3384	C6	3A45	D5	3IC0	E8	3L44	E1	3T22	E9	5404	B6	6I81	A1	7I32	A3	9726	D5	9P04	B8
2003	B4	2894	D3	2IB8	A1	2PF7	C8	3009	C4	3385	B6	3A46	D5	3IC1	A3	3L45	E1	3T23	E8	5408	B6	6IA1	A1	7I35	A8	9740	B4	9P05	B9
2010	C5	2920	D5	2IB9	B2	2PG2	C9	3010	B5	3386	C6	3A47	D6	3IC2	A5	3L46	E1	3T24	E8	5702	C5	6IA7	A5	7I36	A8	9753	B4	9P07	C9
2017	B5	2932	C5	2IC3	A3	2PG6	D7	3013	B5	3389	C6	3A48	D5	3IC3	A5	3L47	E1	3T25	E8	5719	E4	6P00	B8	7I37	A8	9754	B4	9P09	B9
2019	A5	2933	C5	2IC5	B1	2T01	A9	3014	B5	3391	C6	3A49	D5	3IC5	E8	3L48	F1	3T26	E8	5720	E4	6P01	B8	7I38	A7	9755	B4	9P10	B8
2022	C4	2A01	D6	2IC6	A2	2T02	D9	3015	B5	3401	B6	3A51	D6	3IC7	E8	3L49	E1	3T27	E9	5723	E5	6P10	C7	7I40	F6	9756	B4	9P11	B8
2023	B4	2A07	C6	2IC7	A2	2T03	D8	3016	B5	3405	B6	3A52	D6	3IC8	A3	3P03	C8	3T28	D8	5724	E5	6PB1	B7	7I41	A2	9757	B4	9P12	C9
2024	B4	2A19	D7	2IE0	B8	2T04	A9	3017	B5	3407	A6	3A53	D6	3ID0	A3	3P04	C8	3T29	E9	5727	E5	6PB5	D8	7I44	A5	9758	B4	9P16	B8
2026	B5	2A24	D7	2IF0	A1	2T05	A9	3022	C4	3408	B6	3A55	D5	3ID2	E6	3P05	C8	3T30	E9	5728	E5	6PB9	D7	7I46	E8	9759	B4	9P17	C8
2033	B5	2A34	D8	2IF8	A2	2T06	A9	3023	C4	3410	A6	3A60	D6	3ID3	F6	3P06	C8	3T31	E9	5763	D3	6T01	A9	7I49	A5	9760	B4	9P18	B9
2036	B4	2A38	D7	2IF9	A2	2T07	D8	3028	C4	3414	B6	3A61	D6	3ID4	F6	3P09	B8	3T32	E8	5769	E3	6T02	D8	7I50	A5	9763	B4	9P20	C8
2038	B4	2A47	D5	2IG1	A8	2T09	A9	3029	B5	3415	B6	3A62	D6	3ID5	A3	3P11	B9	3T33	E9	5770	D3	6T03	A9	7I51	B2	9764	B4	9P21	C8
2040	B4	2A51	C5	2IH1	B1	2T10	D9	3030	C4	3417	A6	3A63	D6	3ID6	E5	3P12	B8	3T51	E9	5771	D3	6T04	D8	7I52	B2	9765	B4	9P22	C9
2041	B5	2A64	D6	2IH3	A5	2T11	D8	3031	B5	3419	A6	3A64	D5	3ID7	A5	3P13	B8	3T52	E9	5A07	D7	6T05	A9	7I55	A2	9766	B4	9P23	C8
2052	A4	2A69	D6	2IH6	A2	2T12	A9	3032	C4	3420	B6	3A65	C5	3ID8	A5	3P14	B8	3T53	E9	5E00	E1	6T06	D9	7I61	B2	9773	B4	9P24	C9
2053	A4	2A70	D6	2IH7	A2	2T13	A9	3034	B4	3421	A6	3A67	D7	3ID9	A3	3P15	B8	3T54	E9	5E01	E2	6T07	D9	7I62	A8	9774	B4	9P25	C9
2054	A4	2A72	D6	2IH8	A2	2T14	D8	3036	C4	3434	A6	3A74	E8	3IE0	F6	3P16	C9	3T55	E9	5E02	E2	6T08	A9	7I64	B2	9775	B4	9P28	C8
2055	A4	2A74	D6	2IH9	A2	2T15	A9	3037	C4	3435	A6	3A77	D7	3IE7	A3	3P21	C8	3T56	E9	5E03	E2	6T10	E9	7L01	B1	9811	D3	9P30	C9
2056	A4	2A75	D6	2IJ0	A8	2T16	D8	3038	C4	3441	B6	3C00	A5	3IF1	E6	3P22	C8	3T57	E9	5E50	C2	6T11	E9	7L03	F1	9820	D4	9P31	C7
2057	A4	2A79	D6	2IJ1	A7	2T17	A9	3040	B5	3445	A6	3C04	A5	3IF2	E6	3P23	C8	3T58	E9	5E54	D1	6U02	E3	7L04	F1	9823	B3	9P32	C7
2060	A4	2A80	D6	2IJ4	A8	2T18	D8	3041	B5	3450	B6	3C05	A5	3IF3	F6	3P24	C8	3T59	E9	5E55	C2	6U10	E3	7L05	E1	9A00	D6	9P52	C7
2061	A4	2A81	D6	2IJ5	E5	2T19	D8	3042	C5	3451	B6	3C10	B5	3IF4	E6	3P31	C9	3T60	E9	5E58	C2	6U11	E4	7P01	B8	9A01	D6	9P53	C7
2063	C4	2A83	D6	2IK1	A2	2T20	D8	3045	A4	3452	B6	3C11	C5	3IF8	E6	3P32	C9	3U12	F5	5I02	E8	6U12	F4	7P03	B9	9A02	D6	9P54	D7
2068	C5	2A88	D6	2IK2	A1	2T21	D9	3046	A4	3453	C6	3C12	B5	3IF9	E6	3P33	C9	3U24	E4	5I04	E8	6U14	E4	7P04	B9	9A03	D6	9P69	B7
2072	C5	2A89	D6	2IK3	A1	2T22	D9	3048	B5	3454	C6	3E04	E1	3IG9	A1	3P36	C9	3U27	E5	5I10	E6	6U16	E4	7P06	C9	9A07	D6	9P71	B7
2074	C5	2A90	D6	2IK6	C6	2T30	E9	3049	B5	3455	C6	3E05	E1	3IGA	F6	3P37	C8	3U32	E3	5I39	B2	6V05	C2	7P07	C9	9A08	D6	9P73	D7
2300	B6	2A91	D5	2IL0	A7	2T31	E8	3050	B5	3456	B6	3E11	E2	3IGB	F6	3P38	C9	3U33	E3	5I42	A2	6Z00	E5	7P11	C9	9A10	E6	9P74	D7
2302	B6	2A92	D6	2IN8	A2	2T32	E9	3051	B5	3457	B6	3E12	E2	3IGC	F6	3P39	C9	3U35	E4	5I45	C6	7002	B5	7P51	C7	9A11	E6	9P75	D7
2303	C6	2A99	D5	2IN9	A2	2T33	E8	3052	B4	3459	C6	3E14	E2	3IGD	F6	3P40	B9	3U36	F5	5P05	B9	7003	B5	7P52	C7	9A12	E6	9PB7	D8
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2307	C6	2AB0	D5	2L22	F1	2T36	E9	3055	B4	3467	C6	3E20	B2	3IH0	F6	3P47	C9	3U39	E4	5P10	C8	7011	C5	7P55	C7	9A15	E6	9T03	D8
2308	C6	2AB3	D6	2L25	B1	2T37	E8	3056	B4	3468	B6	3E21	B2	3IH1	A5	3P48	C8	3U40	E4	5P11	C9	7012	B4	7P56	B7	9A16	E6	9T04	A9
2309	B6	2AB4	D6	2L26	C2	2T38	E9	3057	B4	3470	C6	3E51	D1	3IH2	F6	3P49	C8	3U41	E4	5P50	C7	7015	C5	7P58	C7	9A17	E6	9T05	A9
2310	B6	2AB8	D6	2L27	C2	2T40	D9	3061	B4	3471	C6	3E55	D1	3IH4	F6	3P50	C7	3U42	E4	5PA9	B7	7016	C5	7P59	C7	9A18	D6	9T06	D8
2311	B6	2AC1	E7	2L31	C2	2T41	D8	3062	B4	3700	D4	3E56	D1	3IH7	A3	3P51	C7	3U43	F4	5T02	D9	7020	C4	7P60	C8	9A20	E6	9T07	A9
2312	B6	2AD0	E7	2L32	C2	2T42	E8	3064	C5	3702	E4	3E57	D1	3IH8	A8	3P52	C7	3U44	E3	5T03	D8	7021	C4	7P61	C8	9C02	A4	9T08	A9
2313	B6	2AD3	E7	2L56	B1	2T43	E8	3067	B5	3709	E5	3E58	D1	3IHG	A7	3P53	C8	3U45	E3	5T04	E8	7022	C4	7P62	C8	9E57	C2	9T09	D8
2319	C6	2AD4	E8	2L59	B1	2T44	E8	3069	C5	3710	D5	3E69	C2	3II0	A8	3P54	C7	3U54	E5	5T10	D9	7301	C6	7P63	D8	9E58	C2	9T10	D8
2320	B5	2AD5	E7	2L60	B1	2T45	E8	3070	C4	3711	E4	3E70	C2	3II1	A8	3P55	D7	3U55	F4	5T11	E8	7302	C6	7PB5	B7	9E66	D1	9T11	E8
2321	C5	2AD6	E8	2P01	C8	2T46	D8	3072	B4	3757	A3	3E81	C2	3II2	A8	3P56	C7	3U58	E3	5T12	D9	7303	B6	7T01	D9	9E67	D1	9T12	A9
2323	C5	2AE2	D7	2P11	C9	2T47	E9	3079	C5	3758	E5	3E82	B2	3II3	A8	3P57	C7	3U59	E3	5T13	D9	7305	C6	7T04	E9	9E68	D1	9T14	A9
2325	B6	2AE3	D8	2P12	C9	2T48	E8	3080	C4	3759	D5	3E83	C2	3II5	A2	3P60	C7	3U60	E4	5T14	E8	7306	C6	7T10	E8	9E69	D1	9T50	A9
2326	C6	2AE5	E8	2P14	C9	2T49	E9	3081	B4	3761	D4	3E84	B2	3II6	A2	3P62	C7	3U61	E4	5T15	E8	7307	B6	7T11	E9	9E70	D1	9Y00	D1
2328	C5	2AF0	D7	2P15	C9	2T50	E9	3082	B4	3762	C3	3E85	B2	3II7	A2	3P63	C7	3U62	E4	5T20	A9	7309	C6	7T12	E9	9E71	D1	9Y02	F1
2335	C6	2AK8	E6	2P16	C9	2T51	E8	3083	B4	3763	C3	3E86	B2	3II8	B2	3P64	C7	3U63	E4	5T22	A9	7310	C6	7T13	E9	9E72	D1	9Y03	F1
2337	C6	2AN5	E6	2P18	C8	2T52	E9	3085	B5	3764	C3	3E88	D2	3II9	B2	3P65	B8	3U64	E4	5T25	A9	7312	B6	7T50	A9	9E73	D2	9Y05	E1
2338	C6	2AN6	E6	2P23	C8	2T53	E8	3086	B5	3767	C3	3E89	D1	3IJ2	A2	3P66	B8	3U65	E4	5Y00	F1	7313	C6	7U07	F4	9E75	D1	9Y06	E1
2341	C6	2C00	A5	2P24	C8	2T54	E9	3087	B4	3768	C3	3E90	E1	3IJ3	A2	3P67	B7	3U66	E4	5Y01	E1	7314	C6	7U13	E4	9E76	D1	9Y07	E1
2342	C6	2C02	B5	2P25	C9	2T60	A9	3088	C5	3769	C3	3I01	A8	3IJ4	A2	3P68	B7	3U67	E4	5Y02	F2	7315	C6	7V01	C2	9E77	D2	9Y09	F1
2343	C6	2D04	D1	2P29	C8	2T61	A9	3092	C5	3770	C3	3I02	B8	3IJ6	A2	3P69	B7	3U68	E4	5Y03	F2	7316	C6	7V02	D2	9I00	A7	9Y12	F2
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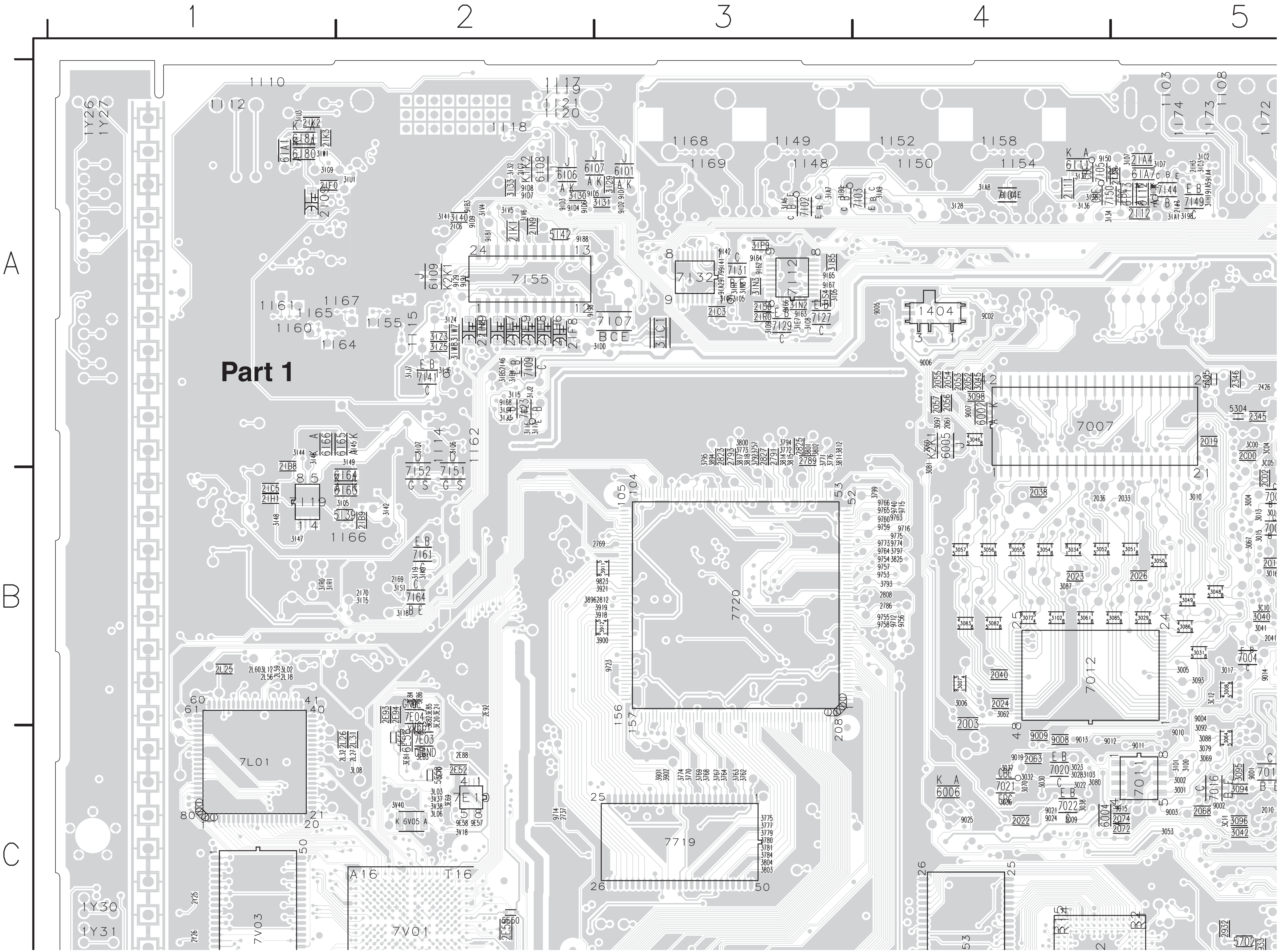
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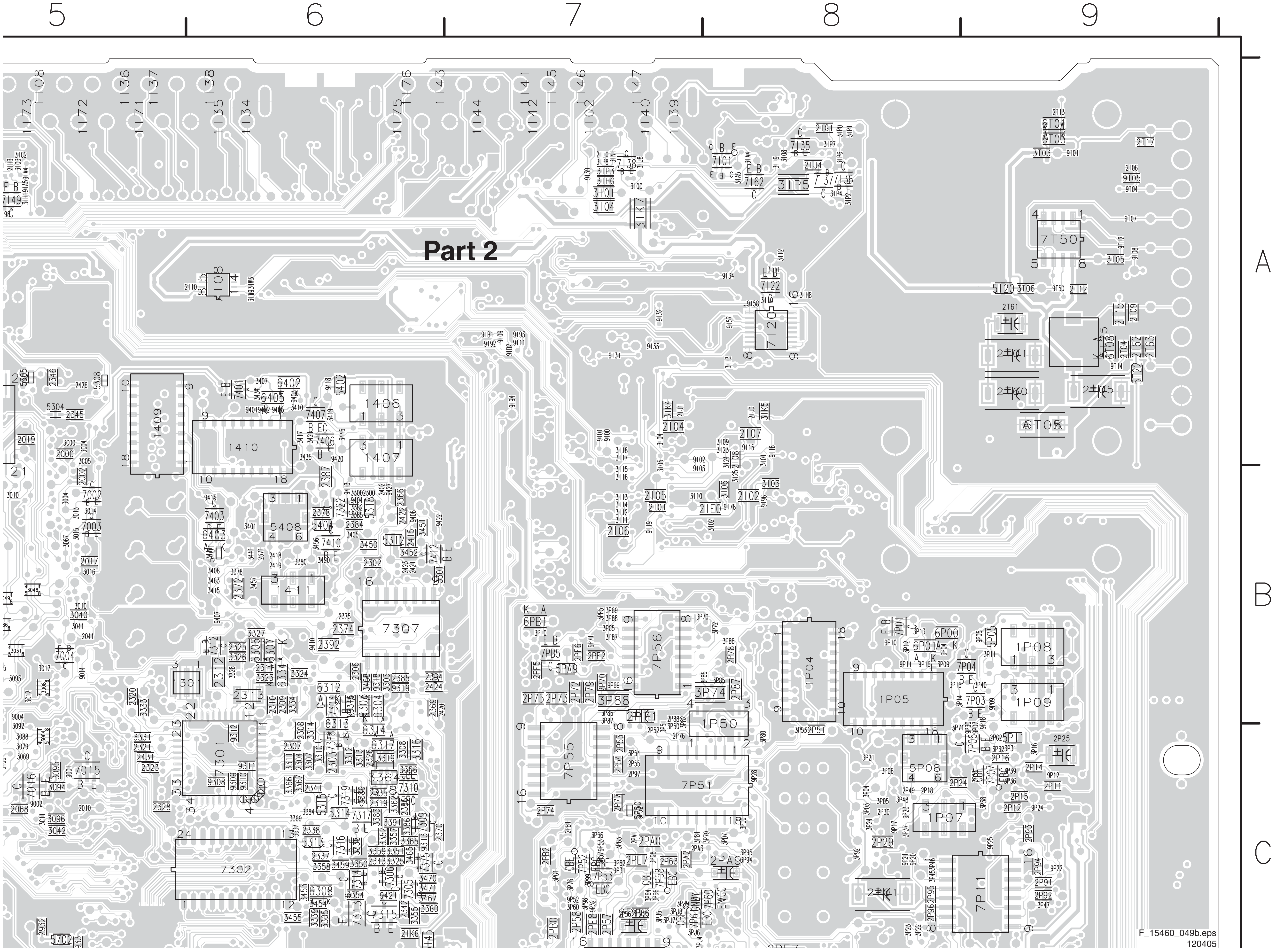
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1301
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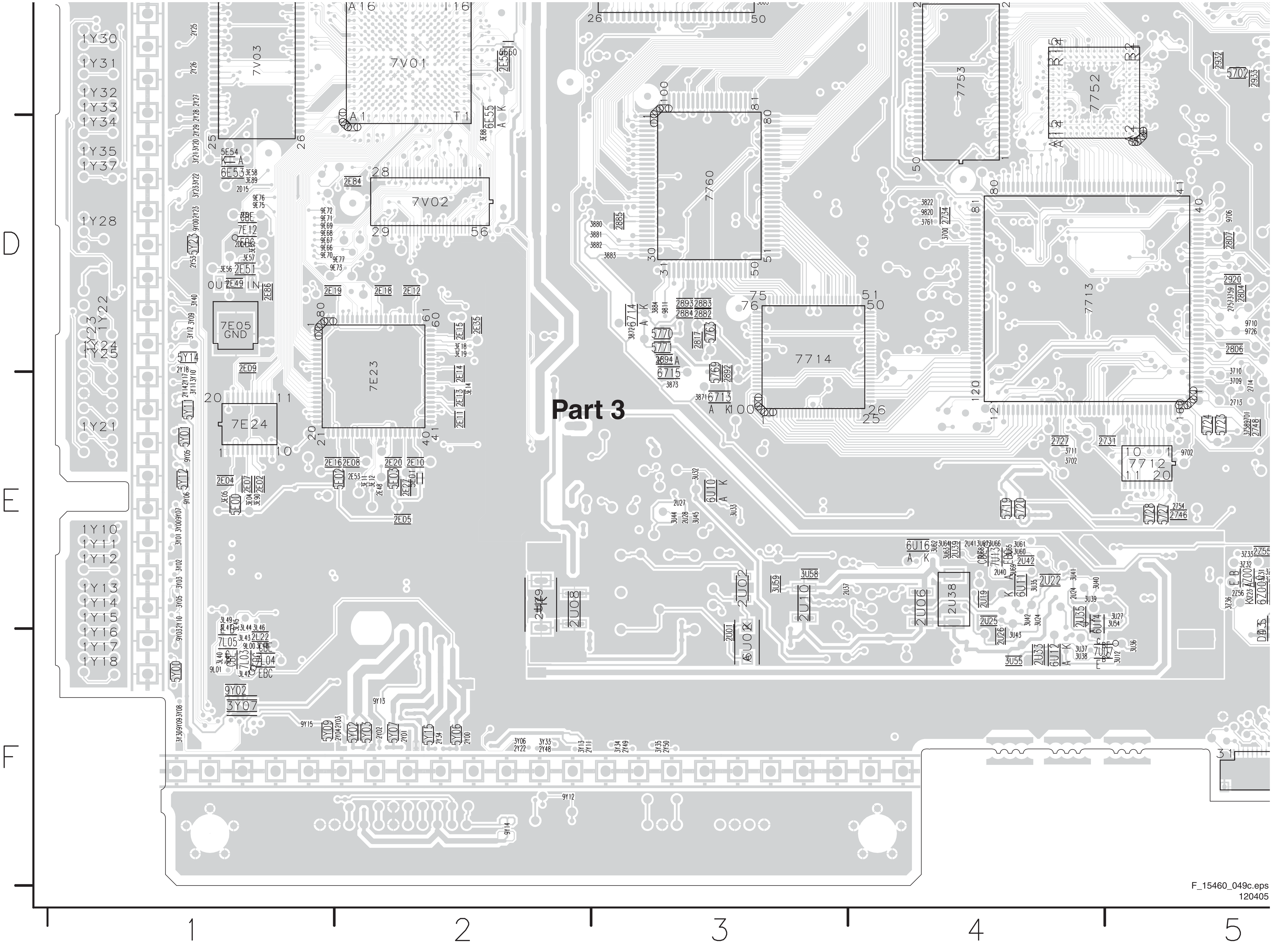
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1Y10
1Y11
1Y12
1Y13
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1Y15
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E
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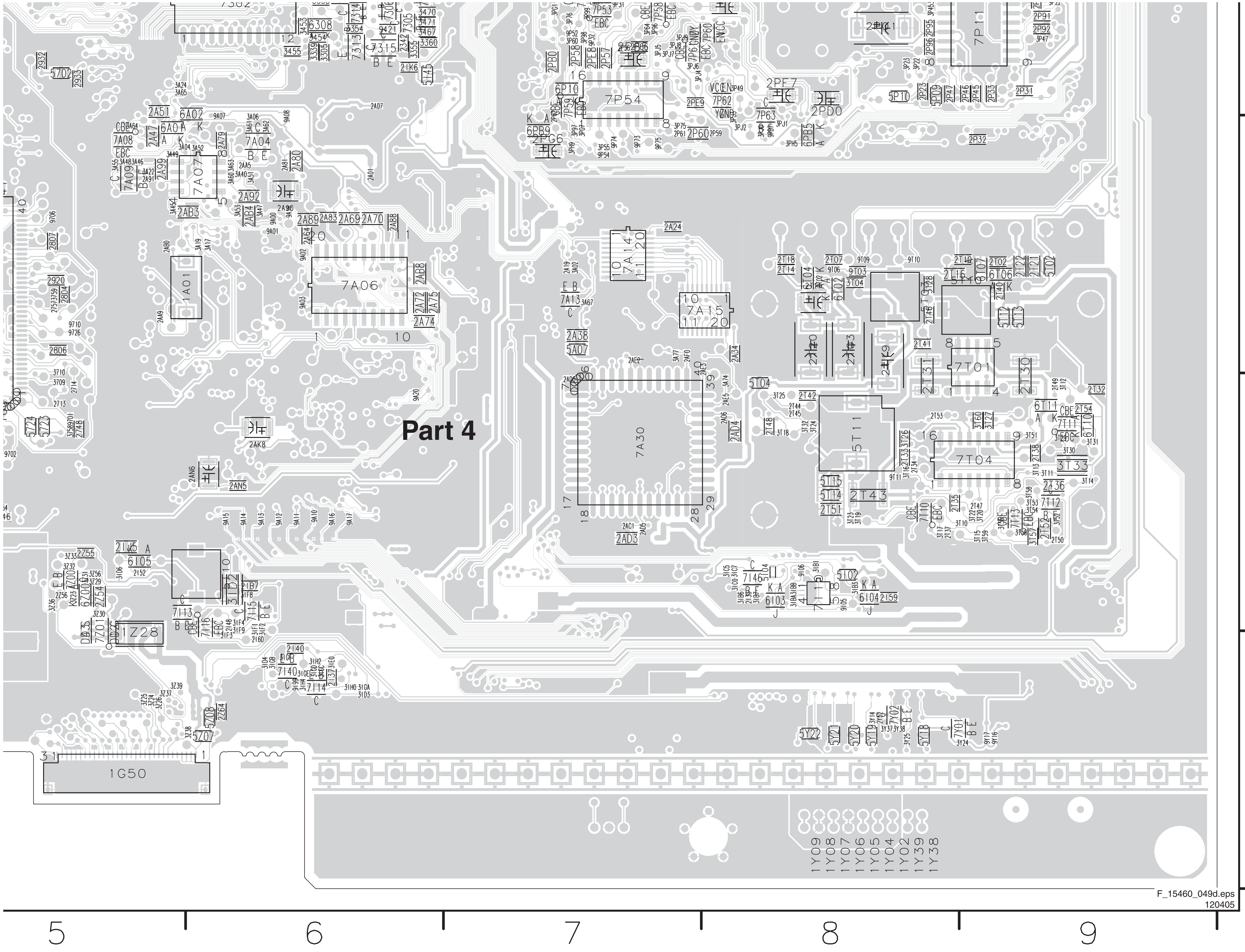
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PDP Audio Amplifier

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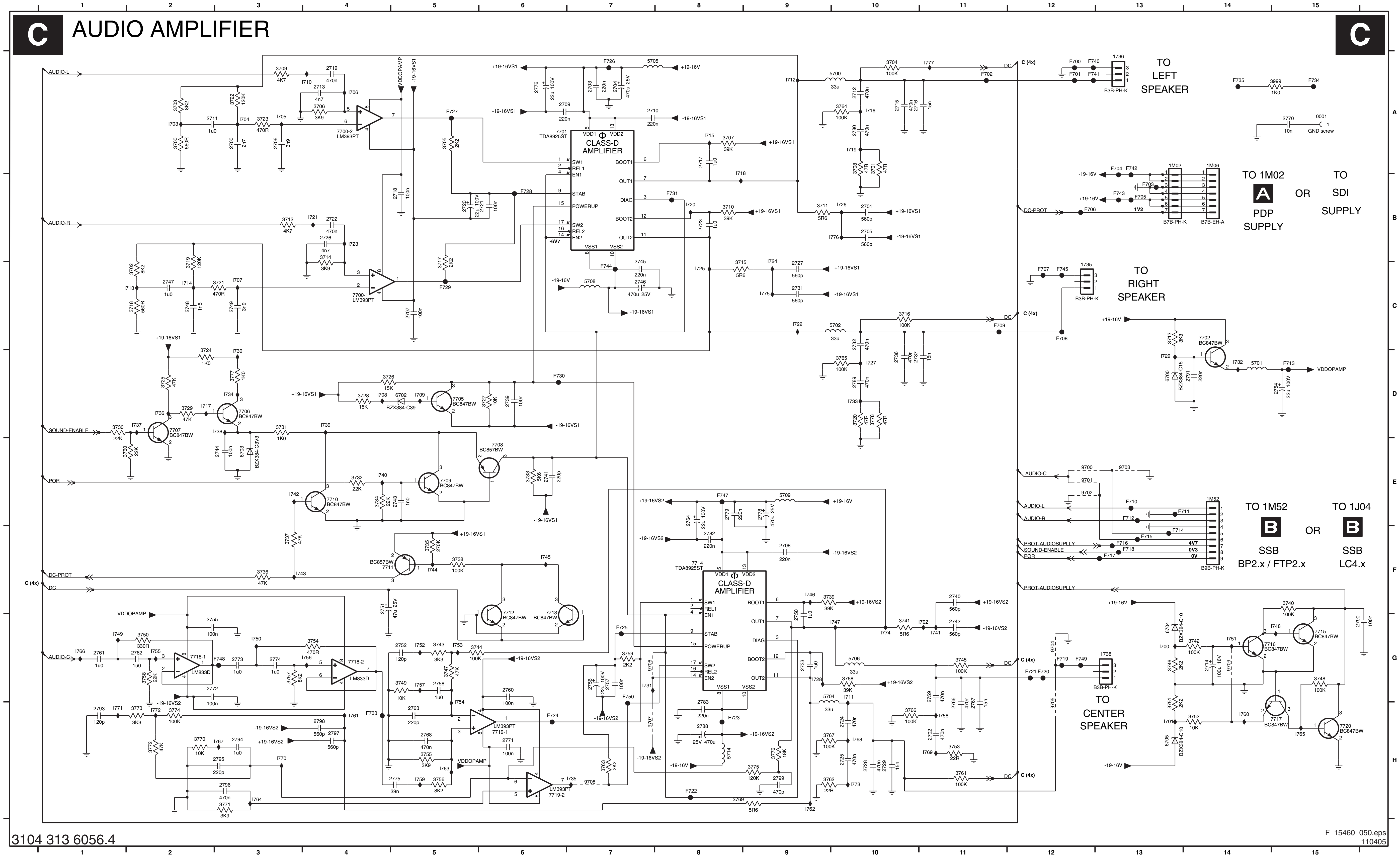
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DC
C (4x)
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CLASS-D
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SW2
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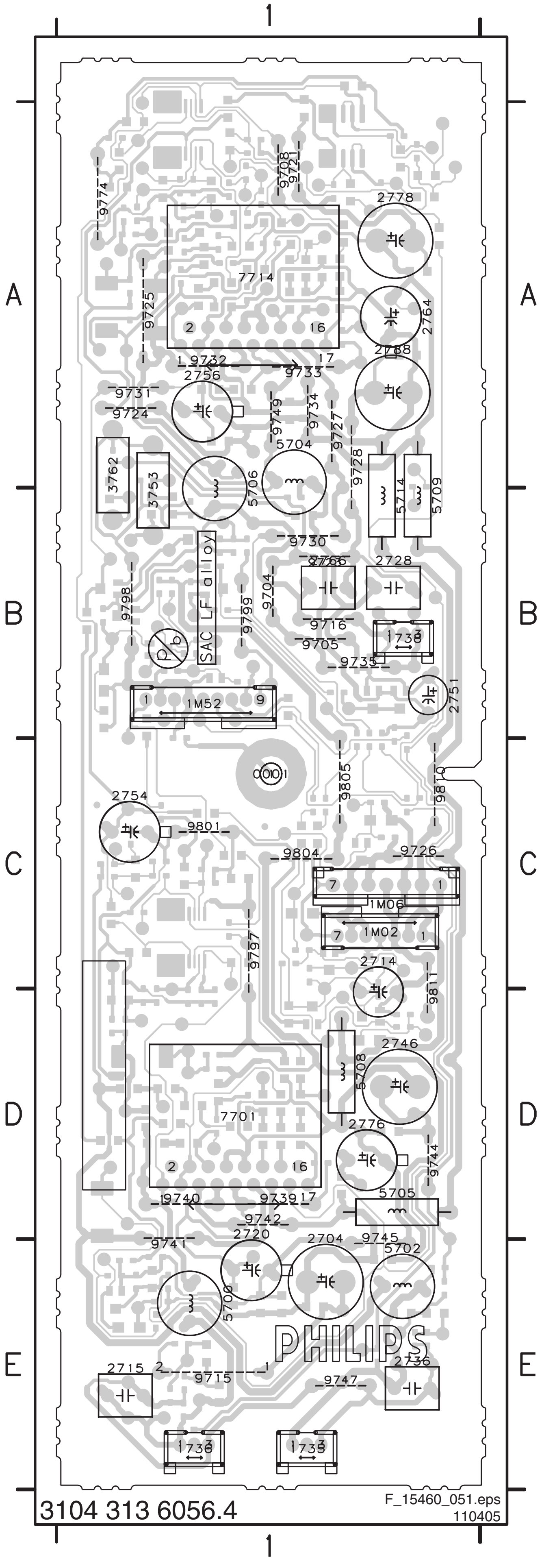
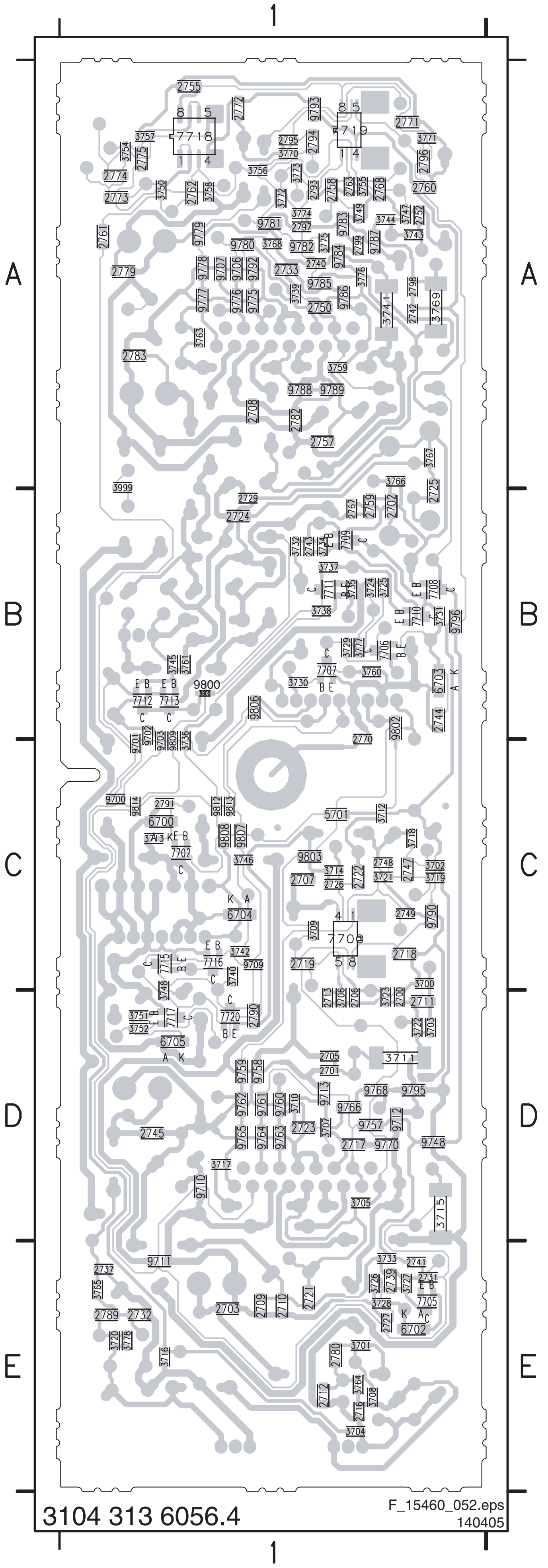
BP2.x / FTP2.x
OR
TO 1J04
B
SSB
LC4.x
PROT-AUDIOSUPPLY
SOUND-ENABLE
POR
4V7
0V3
0V
0001
GND screw
3999
1K0
3104 313 6056.4
F_15460_050.eps
110405

Layout PDP Audio Amplifier (Top Side)



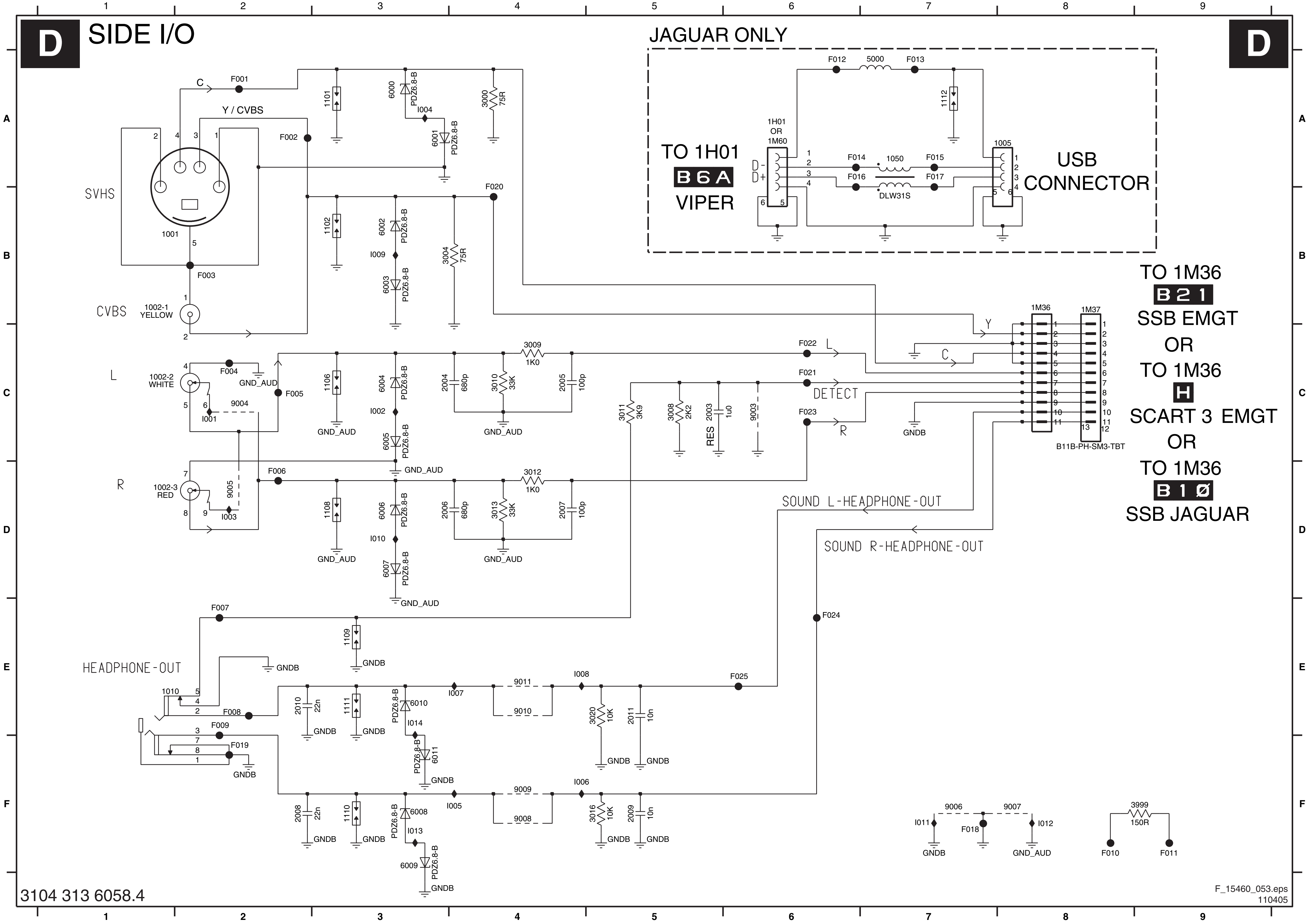
0001	C1
1735	E1
1736	E1
1738	B1
1M02	C1
1M06	C1
1M52	B1
2704	D1
2714	C1
2715	E1
2720	D1
2728	B1
2736	E1
2746	D1
2751	B1
2754	C1
2756	A1
2764	A1
2766	B1
2776	D1
2778	A1
2788	A1
3753	B1
3762	A1
5700	E1
5702	E1
5704	A1
5705	D1
5706	A1
5708	D1
5709	B1
5714	A1
7701	D1
7714	A1
9704	B1
9705	B1
9708	A1
9715	E1
9716	B1
9721	A1
9723	B1
9724	A1
9725	A1
9726	C1
9727	A1
9728	B1
9730	B1
9731	A1
9732	A1
9733	A1
9734	A1
9735	B1
9739	D1
9740	D1
9741	E1
9742	D1
9744	D1
9745	D1
9747	E1
9749	A1
9774	A1
9797	C1
9798	B1
9799	B1
9801	C1
9804	C1
9805	C1
9810	C1
9811	C1

Layout PDP Audio Amplifier (Bottom Side)



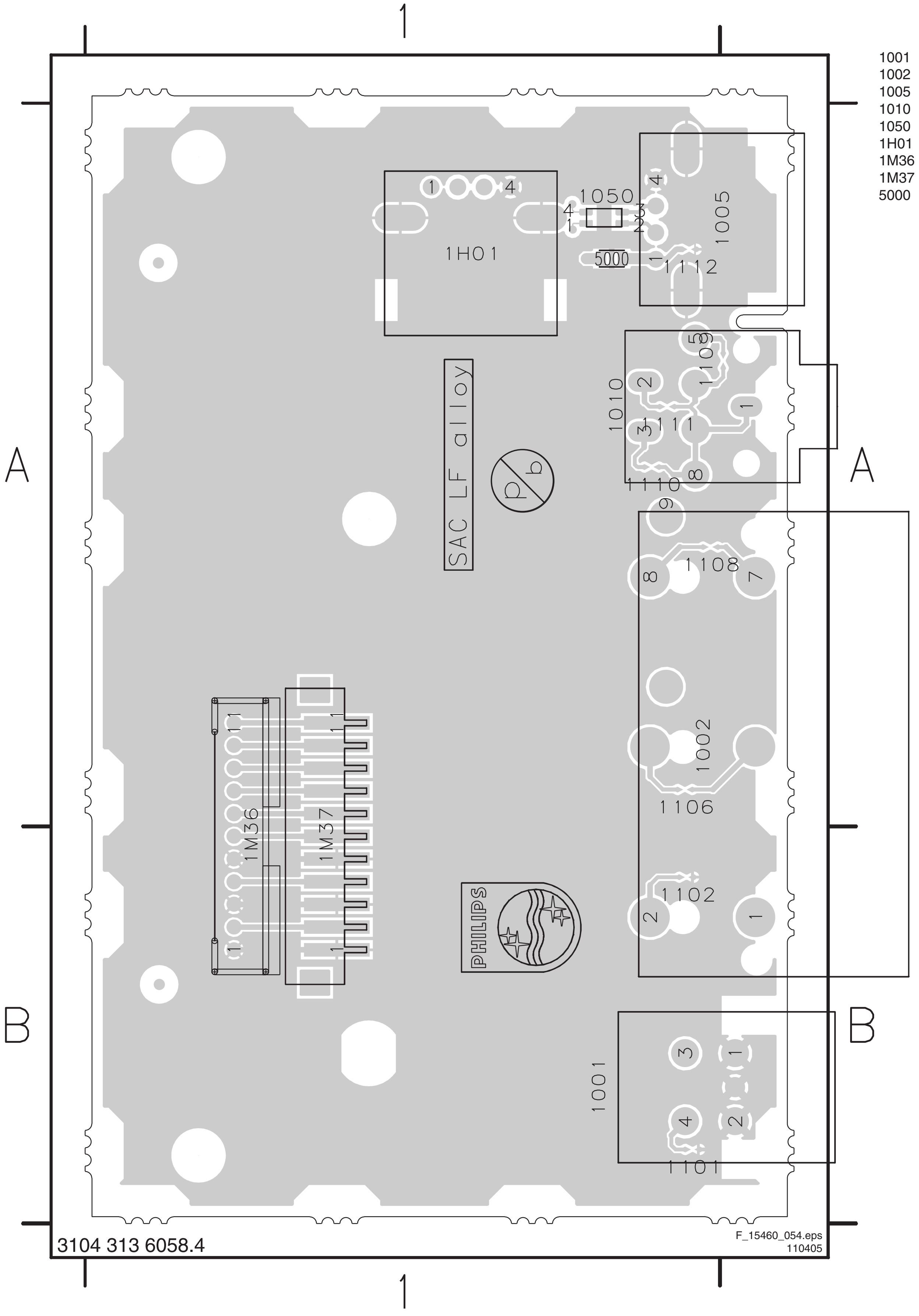
2700	D1	3714	C1	7719	A1
2701	D1	3715	D1	7720	D1
2702	B1	3716	E1	9700	C1
2703	E1	3717	D1	9701	C1
2705	D1	3718	C1	9702	B1
2706	D1	3719	C1	9703	C1
2707	C1	3720	E1	9706	A1
2708	A1	3721	C1	9707	A1
2709	E1	3722	D1	9709	C1
2710	E1	3723	D1	9710	D1
2711	D1	3724	B1	9711	E1
2712	E1	3725	B1	9712	D1
2713	D1	3726	E1	9713	D1
2716	E1	3727	E1	9748	D1
2717	D1	3728	E1	9757	D1
2718	C1	3729	B1	9758	D1
2719	C1	3730	B1	9759	D1
2721	E1	3731	B1	9760	D1
2722	C1	3732	B1	9761	D1
2723	D1	3733	E1	9762	D1
2724	B1	3734	B1	9763	D1
2725	B1	3735	B1	9764	D1
2726	C1	3736	C1	9765	D1
2727	E1	3737	B1	9766	D1
2729	B1	3738	B1	9768	D1
2731	E1	3739	A1	9770	D1
2732	E1	3740	C1	9775	A1
2733	A1	3741	A1	9776	A1
2737	E1	3742	C1	9777	A1
2739	E1	3743	A1	9778	A1
2740	A1	3744	A1	9779	A1
2741	E1	3745	B1	9780	A1
2742	A1	3746	C1	9781	A1
2743	B1	3747	A1	9782	A1
2744	B1	3748	D1	9783	A1
2745	D1	3749	A1	9784	A1
2747	C1	3750	A1	9785	A1
2748	C1	3751	D1	9786	A1
2749	C1	3752	D1	9787	A1
2750	A1	3754	A1	9788	A1
2752	A1	3755	A1	9789	A1
2755	A1	3756	A1	9790	C1
2757	A1	3757	A1	9792	A1
2758	A1	3758	A1	9793	A1
2759	B1	3759	A1	9795	D1
2760	A1	3760	B1	9796	B1
2761	A1	3761	B1	9800	B1
2762	A1	3763	A1	9802	B1
2763	A1	3764	E1	9803	C1
2767	B1	3765	E1	9806	B1
2768	A1	3766	A1	9807	C1
2770	B1	3767	A1	9808	C1
2771	A1	3768	A1	9809	C1
2772	A1	3769	A1	9812	C1
2773	A1	3770	A1	9813	C1
2774	A1	3771	A1	9814	C1
2775	A1	3772	A1		
2779	A1	3773	A1		
2780	E1	3774	A1		
2782	A1	3775	A1		
2783	A1	3776	A1		
2789	E1	3777	B1		
2790	D1	3778	E1		
2791	C1	3999	A1		
2793	A1	5701	C1		
2794	A1	6700	C1		
2795	A1	6702	E1		
2796	A1	6703	B1		
2797	A1	6704	C1		
2798	A1	6705	D1		
2799	A1	7700	C1		
3700	C1	7702	C1		
3701	E1	7705	E1		
3702	C1	7706	B1		
3703	D1	7707	B1		
3704	E1	7708	B1		
3705	D1	7709	B1		
3706	D1	7710	B1		
3707	D1	7711	B1		
3708	E1	7712	B1		
3709	C1	7713	B1		
3710	D1	7715	C1		
3711	D1	7716	C1		
3712	C1	7717	D1		
3713	C1	7718	A1		

Side I/O Panel


D
SIDE I/O
JAGUAR ONLY
D
TO 1H01
B6A
VIPER
USB
CONNECTOR
TO 1M36
B21
SSB EMGT
OR
TO 1M36
H
SCART 3 EMGT
OR
TO 1M36
B10
SSB JAGUAR
SVHS
1001
CVBS
1002-1
YELLOW
L
1002-2
WHITE
R
1002-3
RED
HEADPHONE-OUT
1010
C
Y / CVBS
F001
F002
F003
F004
F005
F006
F007
F008
F009
F012
F013
F014
F015
F016
F017
F018
F019
F020
F021
F022
F023
F024
F025
1101
1102
1106
1108
1109
1110
1111
1112
1H01
OR
1M60
1005
1050
DLW31S
5000
6000
6001
6002
6003
6004
6005
6006
6007
6008
6009
6010
6011
PDZ6.8-B
I001
I002
I003
I004
I005
I006
I007
I008
I009
I010
I011
I012
I013
I014
3000
75R
3004
75R
3009
1K0
3010
33K
3011
3K9
3012
1K0
3013
33K
3008
2K2
3016
10K
3020
10K
3999
150R
2003
1u0
RES
2004
680p
2005
100p
2006
680p
2007
100p
2008
22n
2009
10n
2010
22n
2011
10n
9003
9004
9005
9006
9007
9008
9009
9010
9011
D-
D+
Y
C
L
R
DETECT
SOUND L-HEADPHONE-OUT
SOUND R-HEADPHONE-OUT
1M36
1M37
B11B-PH-SM3-TBT
GND_AUD
GNDB
F010
F011
3104 313 6058.4
F_15460_053.eps
110405

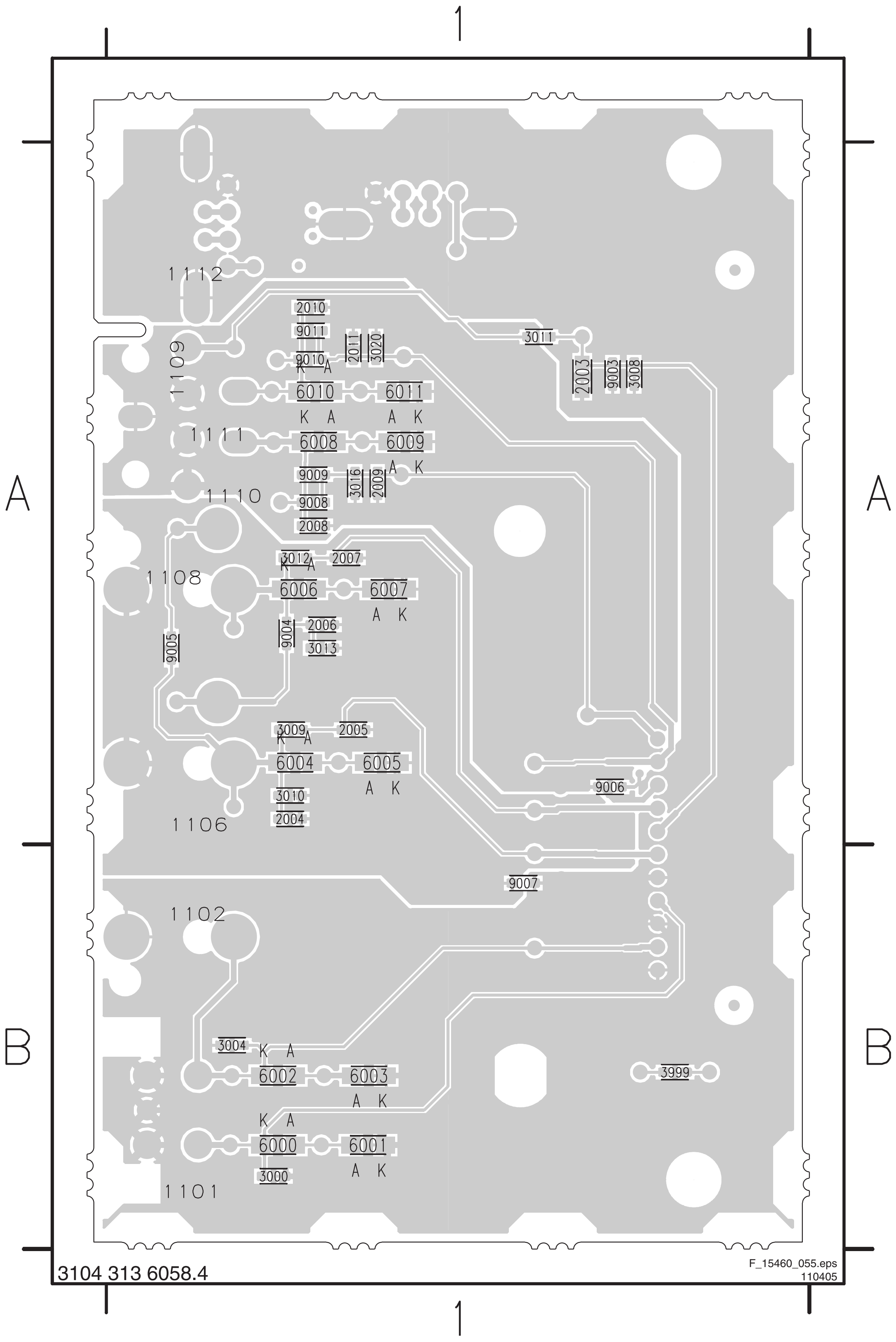
1001	B2
1002-1	B1
1002-2	C1
1002-3	D1
1005	A8
1010	E1
1050	A7
1101	A3
1102	B3
1106	C3
1108	D3
1109	E3
1110	F3
1111	E3
1112	A7
1H01	A6
1M36	B8
1M37	B8
2003	C5
2004	C3
2005	C4
2006	D3
2007	D4
2008	F2
2009	F5
2010	E2
2011	E5
3000	A4
3004	B3
3008	C5
3009	C4
3010	C4
3011	C5
3012	D4
3013	D4
3016	F5
3020	E5
3999	F9
5000	A7
6000	A3
6001	A3
6002	B3
6003	B3
6004	C3
6005	C3
6006	D3
6007	D3
6008	F3
6009	F3
6010	E3
6011	F3
9003	C6
9004	C2
9005	D2
9006	F7
9007	F8
9008	F4
9009	F4
9010	E4
9011	E4
F001	A2
F002	A2
F003	B2
F004	C2
F005	C2
F006	D2
F007	E2
F008	E2
F009	E2
F010	F8
F011	F9
F012	A6
F013	A7
F014	A6
F015	A7
F016	A6
F017	A7
F018	F7
F019	F2
F020	B4
F021	C6
F022	C6
F023	C6
F024	E6
F025	E6
I001	C2
I002	C3
I003	D2
I004	A3
I005	F4
I006	F4
I007	E4
I008	E4
I009	B3
I010	D3
I011	F7
I012	F8
I013	F3
I014	E3

Layout Side I/O Panel (Top Side)


1
A
B
1H01
1050
5000
1005
1112
1010
1111
1110
1108
1002
1106
1102
1001
1101
1M36
1M37
SAC LF alloy
Pb
PHILIPS
3104 313 6058.4
F_15460_054.eps
110405

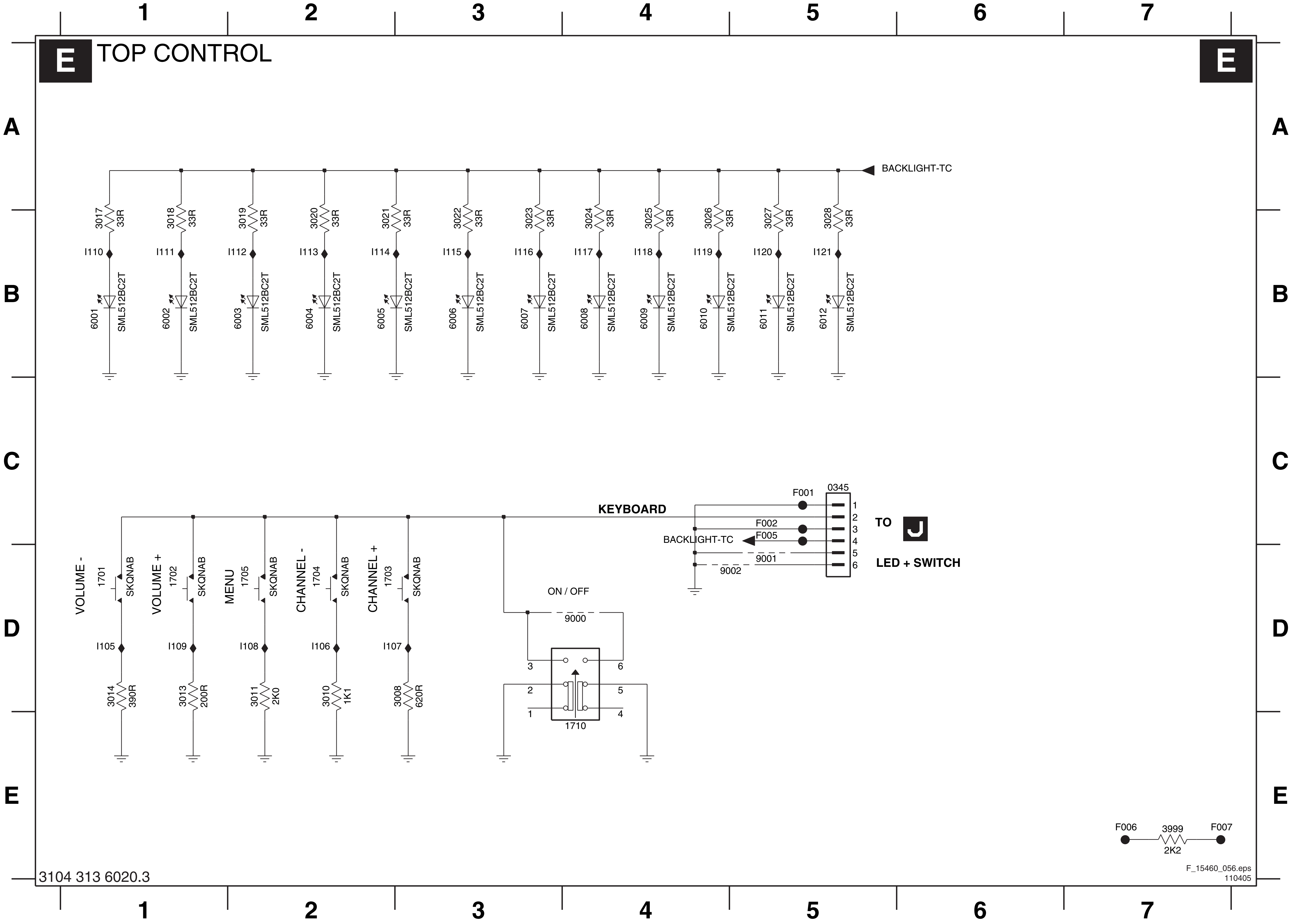
1001	B1
1002	A1
1005	A1
1010	A1
1050	A1
1H01	A1
1M36	B1
1M37	B1
5000	A1

Layout Side I/O Panel (Bottom Side)


1
A
B
1112
1109
1111
1110
1108
1106
1102
1101
6010
6011
6008
6009
6006
6007
6004
6005
6002
6003
6000
6001
3104 313 6058.4
F_15460_055.eps
110405

2003	A1
2004	A1
2005	A1
2006	A1
2007	A1
2008	A1
2009	A1
2010	A1
2011	A1
3000	B1
3004	B1
3008	A1
3009	A1
3010	A1
3011	A1
3012	A1
3013	A1
3016	A1
3020	A1
3999	B1
6000	B1
6001	B1
6002	B1
6003	B1
6004	A1
6005	A1
6006	A1
6007	A1
6008	A1
6009	A1
6010	A1
6011	A1
9003	A1
9004	A1
9005	A1
9006	A1
9007	B1
9008	A1
9009	A1
9010	A1
9011	A1

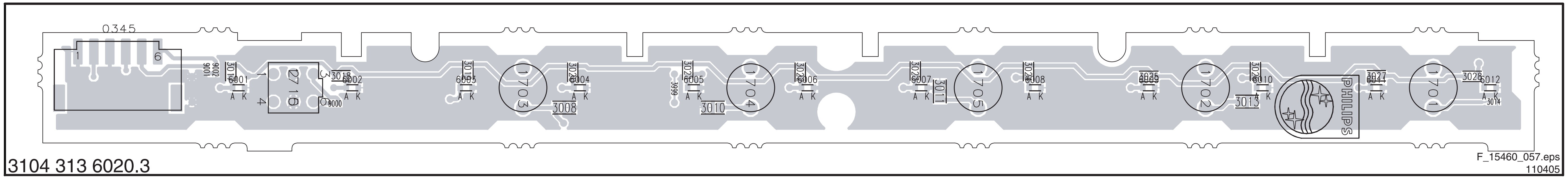
Top Control Panel


E
TOP CONTROL
1 2 3 4 5 6 7
A B C D E
BACKLIGHT-TC
3017 33R
3018 33R
3019 33R
3020 33R
3021 33R
3022 33R
3023 33R
3024 33R
3025 33R
3026 33R
3027 33R
3028 33R
I110 I111 I112 I113 I114 I115 I116 I117 I118 I119 I120 I121
6001 SML512BC2T
6002 SML512BC2T
6003 SML512BC2T
6004 SML512BC2T
6005 SML512BC2T
6006 SML512BC2T
6007 SML512BC2T
6008 SML512BC2T
6009 SML512BC2T
6010 SML512BC2T
6011 SML512BC2T
6012 SML512BC2T
KEYBOARD
VOLUME - 1701 SKQNAB
VOLUME + 1702 SKQNAB
MENU 1705 SKQNAB
CHANNEL - 1704 SKQNAB
CHANNEL + 1703 SKQNAB
I105 I109 I108 I106 I107
3014 390R
3013 200R
3011 2K0
3010 1K1
3008 620R
ON / OFF
9000
1710
F001 F002 F005
0345
BACKLIGHT-TC
9001
9002
TO J
LED + SWITCH
F006 3999 2K2 F007
3104 313 6020.3
F_15460_056.eps
110405

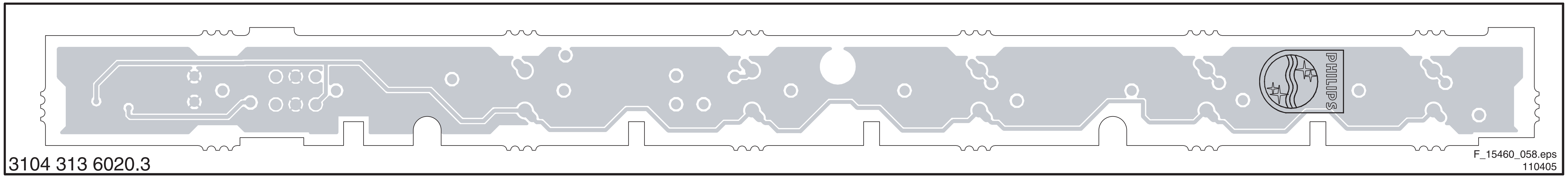
0345 C5	I121 B5
1701 D1	
1702 D1	
1703 D2	
1704 D2	
1705 D2	
1710 E4	
3008 D3	
3010 D2	
3011 D2	
3013 D1	
3014 D1	
3017 B1	
3018 B1	
3019 B2	
3020 B2	
3021 B2	
3022 B3	
3023 B3	
3024 B4	
3025 B4	
3026 B4	
3027 B5	
3028 B5	
3999 E7	
6001 B1	
6002 B1	
6003 B2	
6004 B2	
6005 B2	
6006 B3	
6007 B3	
6008 B4	
6009 B4	
6010 B4	
6011 B5	
6012 B5	
9000 D4	
9001 D5	
9002 D5	
F001 C5	
F002 C5	
F005 C5	
F006 E7	
F007 E7	
I105 D1	
I106 D2	
I107 D2	
I108 D2	
I109 D1	
I110 B1	
I111 B1	
I112 B2	
I113 B2	
I114 B2	
I115 B3	
I116 B3	
I117 B4	
I118 B4	
I119 B4	
I120 B5	

Layout Top Control Panel (Top Side)

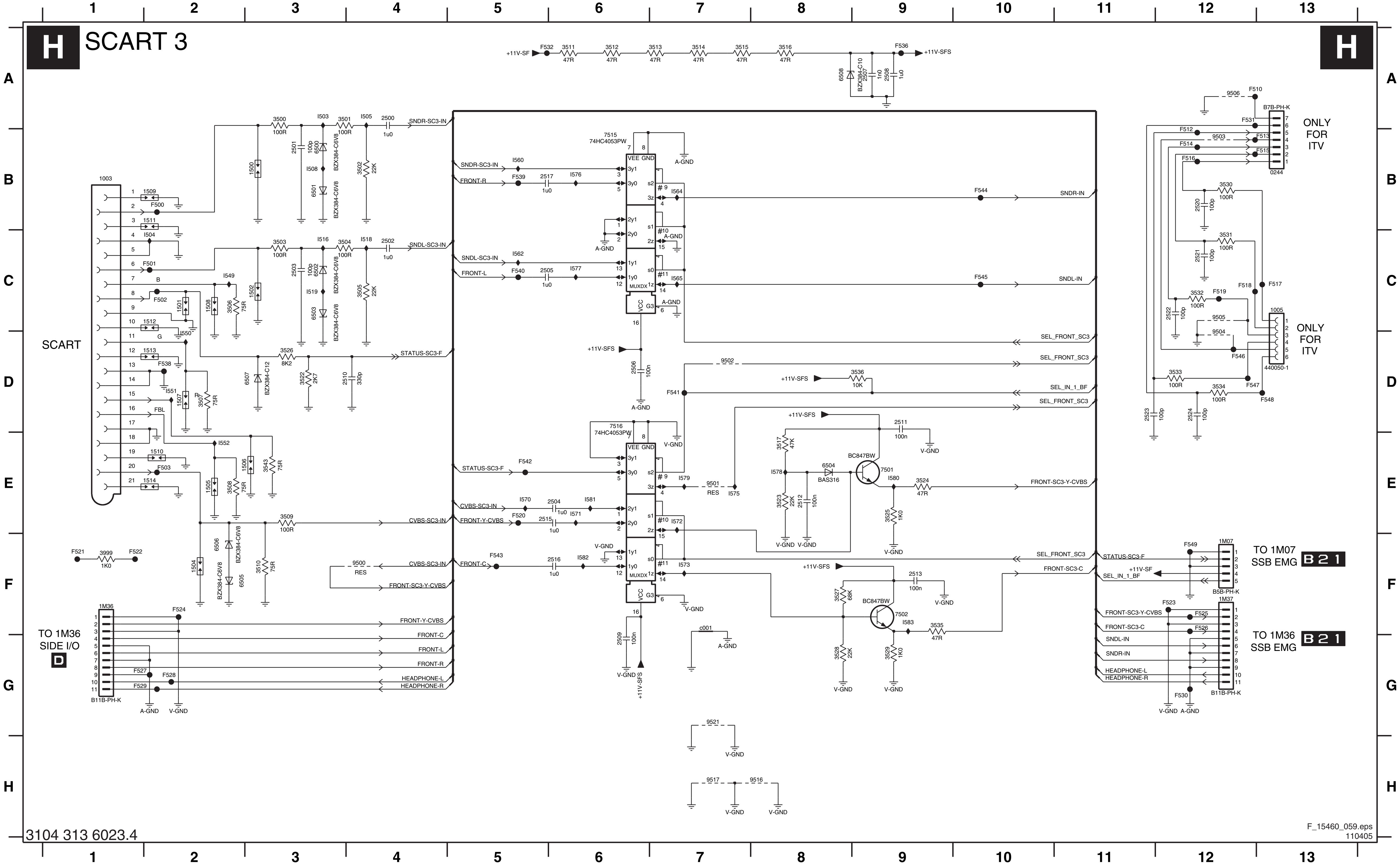
0345 --
1701 --
1702 --
1703 --
1704 --
1705 --
1710 --
3008 --
3010 --
3011 --
3013 --
3014 --
3017 --
3018 --
3019 --
3020 --
3021 --
3022 --
3023 --
3024 --
3025 --
3026 --
3027 --
3028 --
3999 --
6001 --
6002 --
6003 --
6004 --
6005 --
6006 --
6007 --
6008 --
6009 --
6010 --
6011 --
6012 --
9000 --
9001 --
9002 --


0345
1
6
9002
9001
6001
A K
7710
4
3
3015
6002
9000
6003
1703
3008
6004
3999
6005
1704
3010
6006
6007
3011
1705
6008
3025
6009
1702
3013
6010
PHILIPS
3027
6011
1701
3028
6012
3014
3104 313 6020.3
F_15460_057.eps
110405

Layout Top Control Panel (Bottom Side)


PHILIPS
3104 313 6020.3
F_15460_058.eps
110405

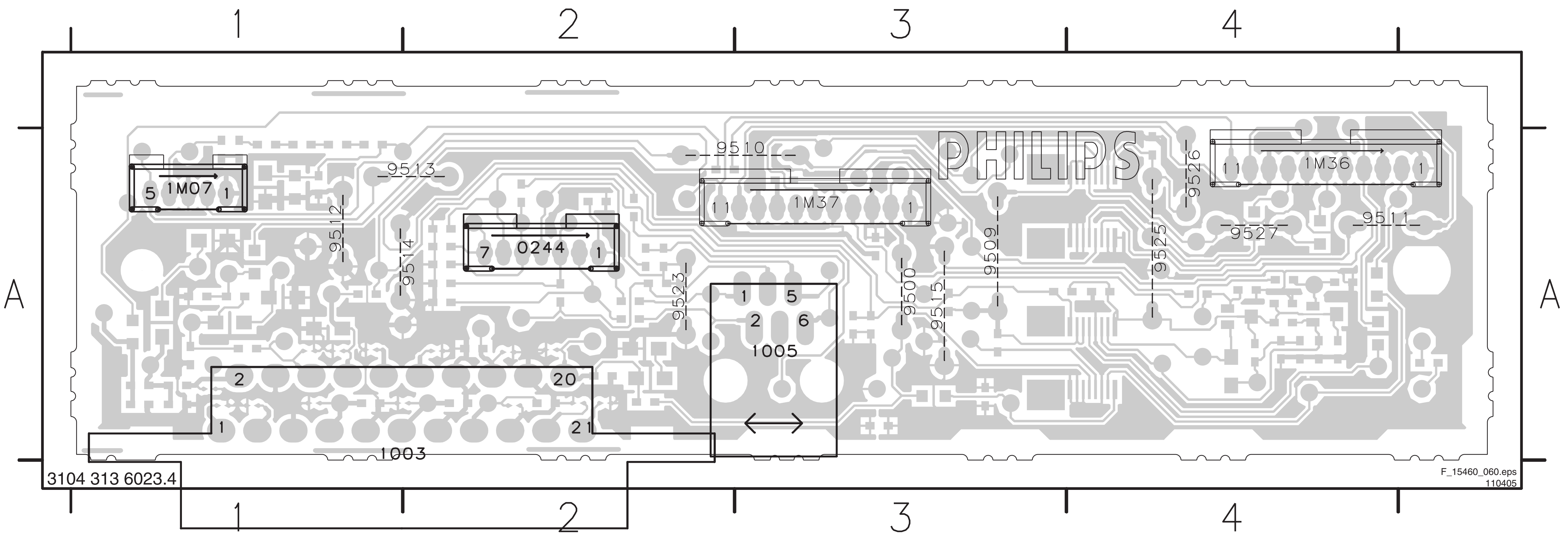
SCART 3 Panel


H
SCART 3
SCART
1003
7515
74HC4053PW
7516
74HC4053PW
MUXDX
BC847BW
7501
7502
BAS316
+11V-SF
+11V-SFS
A-GND
V-GND
SNDR-SC3-IN
SNDL-SC3-IN
STATUS-SC3-F
CVBS-SC3-IN
FRONT-R
FRONT-L
FRONT-C
FRONT-Y-CVBS
FRONT-SC3-Y-CVBS
FRONT-SC3-C
SNDR-IN
SNDL-IN
SEL_FRONT_SC3
SEL_IN_1_BF
HEADPHONE-L
HEADPHONE-R
1M36
B11B-PH-K
TO 1M36
SIDE I/O
D
1M07
B5B-PH-K
TO 1M07
SSB EMG
B21
1M37
B11B-PH-K
TO 1M36
SSB EMG
B21
0244
B7B-PH-K
ONLY
FOR
ITV
1005
440050-1
ONLY
FOR
ITV
1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H
3104 313 6023.4
F_15460_059.eps
110405

0244	B13	9516	H8
1003	B1	9517	H7
1005	C13	9521	G7
1500	B3	F500	B2
1501	C2	F501	C2
1502	C3	F502	C2
1504	F2	F503	E2
1505	E2	F510	A12
1506	E3	F512	B12
1507	D2	F513	B13
1508	C2	F514	B12
1509	B2	F515	B13
1510	E2	F516	B12
1511	B2	F517	C13
1512	C2	F518	C12
1513	D2	F519	C12
1514	E2	F520	E5
1M07	F12	F521	F1
1M36	F1	F522	F1
1M37	F12	F523	F12
2500	A4	F524	F2
2501	B3	F525	F12
2502	C4	F526	F12
2503	C3	F527	G1
2504	E6	F528	G2
2505	C5	F529	G1
2506	D6	F530	G12
2507	A9	F531	A12
2508	A9	F532	A5
2509	G6	F536	A9
2510	D4	F538	D2
2511	D9	F539	B5
2512	E8	F540	C5
2513	F9	F541	D7
2515	E5	F542	E5
2516	F6	F543	F5
2517	B5	F544	B10
2520	B12	F545	C10
2521	C12	F546	D12
2522	C12	F547	D12
2523	D11	F548	D13
2524	D12	F549	F12
3500	A3	I503	A3
3501	A3	I504	C2
3502	B4	I505	A4
3503	C3	I508	B3
3504	C3	I516	C3
3505	C4	I518	C4
3506	C2	I519	C3
3507	D2	I549	C2
3508	E2	I550	D2
3509	E3	I551	D2
3510	F3	I552	E2
3511	A6	I560	B5
3512	A6	I562	C5
3513	A7	I564	B7
3514	A7	I565	C7
3515	A7	I570	E5
3516	A8	I571	E6
3517	E8	I572	E7
3522	D3	I573	F7
3523	E8	I575	E7
3524	E9	I576	B6
3525	E9	I577	C6
3526	D3	I578	E8
3527	F8	I579	E7
3528	G8	I580	E9
3529	G9	I581	E6
3530	B12	I582	F6
3531	C12	I583	F9
3532	C12	c001	F7
3533	D12		
3534	D12		
3535	F9		
3536	D9		
3543	E3		
3999	F1		
6500	B3		
6501	B3		
6502	C3		
6503	C3		
6504	E8		
6505	F2		
6506	F2		
6507	D2		
6508	A8		
7501	E9		
7502	F9		
7515	B6		
7516	D6		
9500	F4		
9501	E7		
9502	D7		
9503	B12		
9504	D12		
9505	C12		
9506	A12		

Layout SCART 3 Panel (Top Side)

0244	A2
1003	A1
1005	A3
1M07	A1
1M36	A4
1M37	A3
9500	A3
9509	A3
9510	A3
9511	A4
9512	A1
9513	A2
9514	A1
9515	A3
9523	A2
9525	A4
9526	A4
9527	A4


1
2
3
4
A
1M07
5
1
9513
9512
9514
0244
7
1
9510
1M37
11
1
9523
1005
1
5
2
6
9500
9515
9509
PHILIPS
9526
1M36
11
1
9525
9527
9511
2
20
1
21
1003
3104 313 6023.4
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110405

Layout SCART 3 Panel (Bottom Side)

2500	A4
2501	A4
2502	A4
2503	A4
2504	A2
2505	A1
2506	A1
2507	A4
2508	A4
2509	A1
2510	A2
2511	A1
2512	A1
2513	A1
2515	A1
2516	A1
2517	A1
2520	A3
2521	A3
2522	A3
2523	A3
2524	A3
3500	A4
3501	A4
3502	A4
3503	A4
3504	A4
3505	A4
3506	A4
3507	A3
3508	A3
3509	A3
3510	A3
3511	A4
3512	A4
3513	A4
3514	A4
3515	A4
3516	A4
3517	A1
3522	A2
3523	A1
3524	A1
3525	A1
3526	A4
3527	A1
3528	A1
3529	A1
3530	A3
3531	A3
3532	A3
3533	A3
3534	A3
3535	A1
3536	A2
3543	A3
3999	A1
6500	A4
6501	A4
6502	A4
6503	A4
6504	A1
6505	A3
6506	A3
6507	A4
6508	A4
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7502	A1
7515	A2
7516	A2
9501	A2
9502	A2
9503	A3
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9505	A3
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9517	A2
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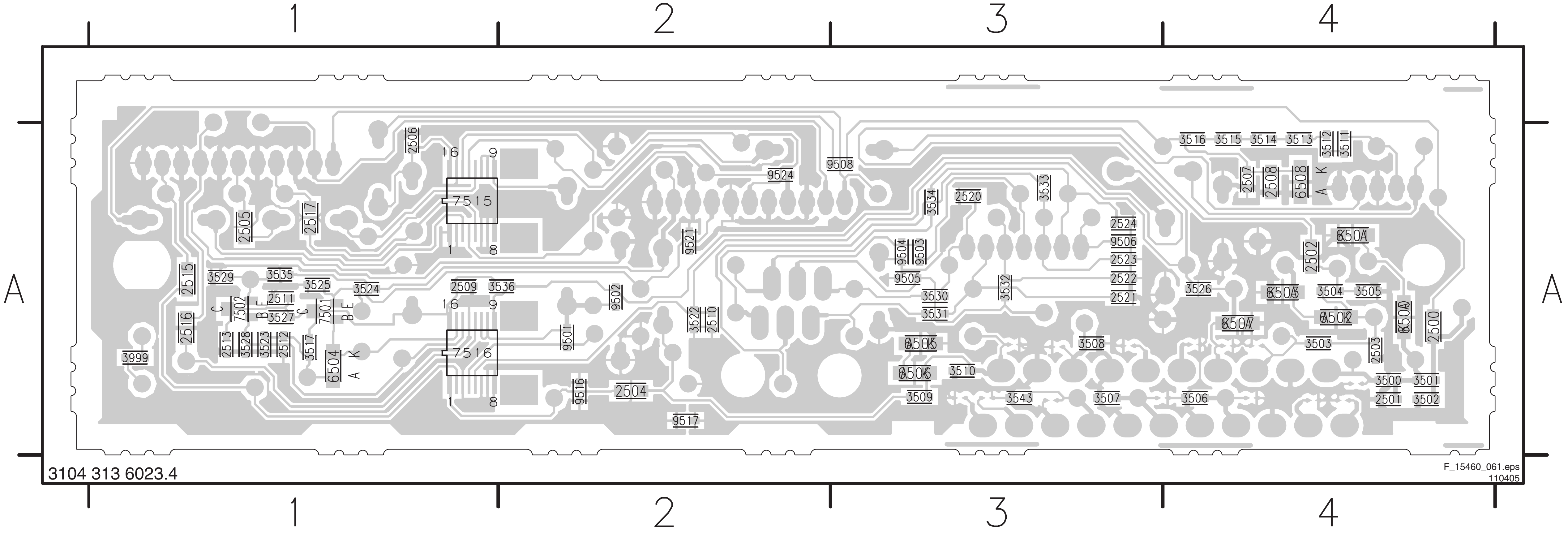
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2511
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7502
7501
2513
3528
3523
2512
3517
6504
A
K
C
B
E
2509
3536
16
9
7516
1
8
9501
9502
9516
2504
9517
9521
9524
9508
3522
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3533
9504
9503
9505
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3531
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6505
6506
3510
3509
3543
3508
3507
3506
2524
9506
2523
2522
2521
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3514
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3512
3511
2507
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6508
6504
2502
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6503
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6507
6502
6501
2500
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2501
3502
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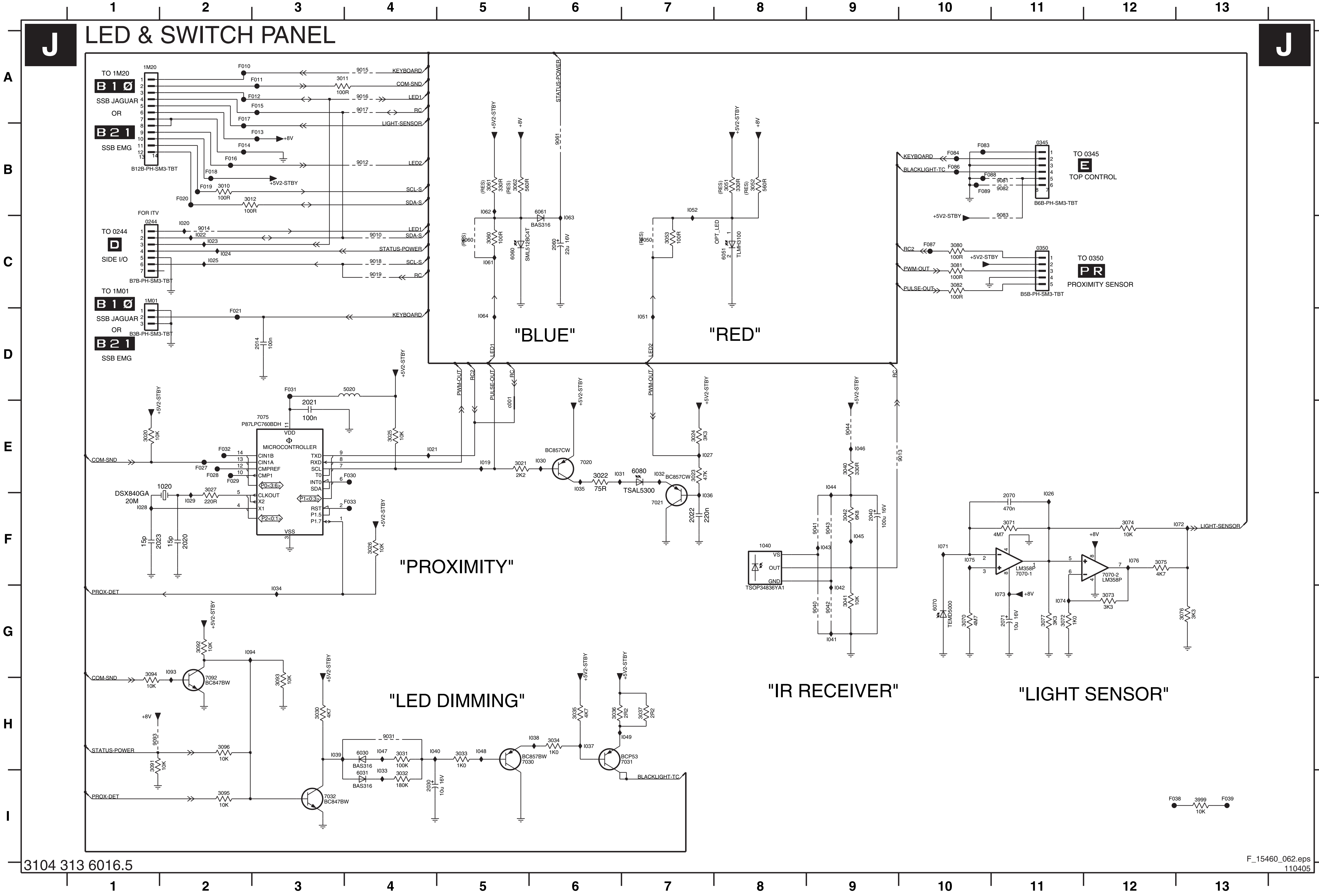
LED and Switch Panel


J
LED & SWITCH PANEL
1 2 3 4 5 6 7 8 9 10 11 12 13
A B C D E F G H I
TO 1M20
B10
SSB JAGUAR
OR
B21
SSB EMG
1M20
B12B-PH-SM3-TBT
FOR ITV
TO 0244
D
SIDE I/O
0244
B7B-PH-SM3-TBT
TO 1M01
1M01
B3B-PH-SM3-TBT
KEYBOARD
COM-SND
LED1
RC
LIGHT-SENSOR
LED2
SCL-S
SDA-S
STATUS-POWER
+8V
+5V2-STBY
"BLUE"
"RED"
TO 0345
E
TOP CONTROL
0345
B6B-PH-SM3-TBT
BLACKLIGHT-TC
TO 0350
PR
PROXIMITY SENSOR
0350
B5B-PH-SM3-TBT
RC2
PWM-OUT
PULSE-OUT
SML512BC4T
BAS316
TLMH3100
OPT_LED
7075
P87LPC760BDH
VDD
MICROCONTROLLER
CIN1B
CIN1A
CMPREF
CMP1
CLKOUT
X2
X1
TXD
RXD
SCL
T0
INT0
SDA
RST
P1.5
P1.7
VSS
DSX840GA
20M
BC857CW
TSAL5300
"PROXIMITY"
PROX-DET
"LED DIMMING"
BC847BW
BC857BW
BCP53
"IR RECEIVER"
TSOP34836YA1
VS
OUT
GND
"LIGHT SENSOR"
LM358P
7070-1
7070-2
TEMD5000
3104 313 6016.5
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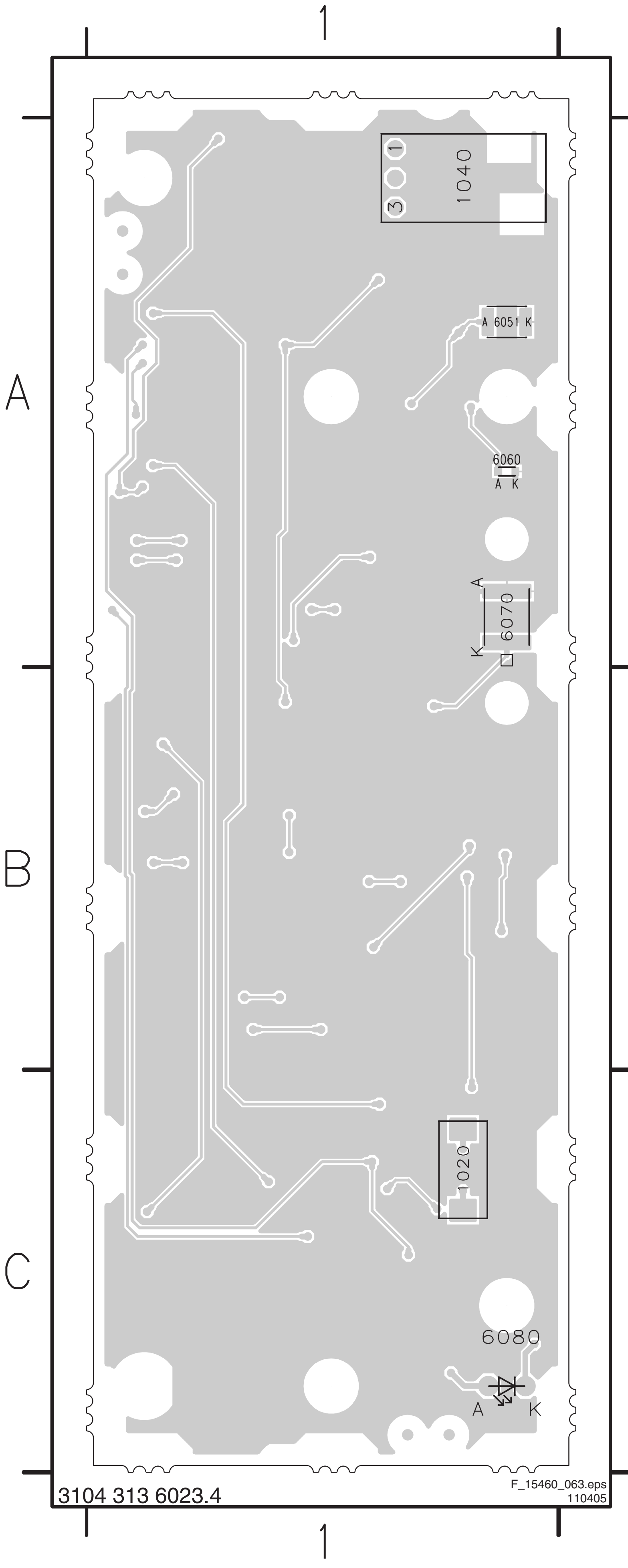
0244 C1
0345 B11
0350 C11
1020 E2
1040 F8
1M01 C1
1M20 A1
2014 D3
2020 F2
2021 E3
2022 F7
2023 F1
2030 I4
2040 F9
2060 C6
2070 F11
2071 G11
3010 B2
3011 A3
3012 B2
3020 E1
3021 E5
3022 E6
3023 E7
3024 E7
3025 E4
3026 F4
3027 E2
3030 H3
3031 H4
3032 I4
3033 H5
3034 H6
3035 H6
3036 H6
3037 H7
3040 E9
3041 G9
3042 F9
3051 B8
3052 B8
3053 C7
3060 C5
3061 B5
3062 B5
3070 G10
3071 F11
3072 G11
3073 G12
3074 F12
3075 F12
3076 G13
3077 G11
3080 C10
3081 C10
3082 C10
3091 H1
3092 G2
3093 H3
3094 G1
3095 I2
3096 H2
3999 I13
5020 D4
6030 H4
6031 I4
6051 C8
6060 C5
6061 B6
6070 G10
6080 E7
7020 E6
7021 F7
7030 H5
7031 H6
7032 I3
7070-1 F11
7070-2 F12
7075 E3
7092 H2
9010 C4
9012 B4
9013 E9
9014 C2
9015 A4
9016 A4
9017 A4
9018 C4
9019 C4
9031 H4
9040 G9
9041 F9
9042 G9
9043 F9
9044 E9
9050 C7
9060 C5
9061 B6
9081 B11
9082 B11
9083 C11
9093 H1
F010 A2
F011 A3
F012 A3
F013 B3
F014 B2
F015 A3
F016 B2
F017 A2
F018 B2
F019 B2
F020 B2
F021 D2
F027 E2
F028 E2
F029 E2
F030 E4
F031 D3
F032 E2
F033 F4
F038 I12
F039 I13
F083 B10
F084 B10
F086 B10
F087 C10
F088 B10
F089 B10
I019 E5
I020 C2
I021 E4
I022 C2
I023 C2
I024 C2
I025 C2
I026 F11
I027 E7
I028 F1
I029 F2
I030 E6
I031 E6
I032 E7
I033 I4
I034 G3
I035 E6
I036 F7
I037 H6
I038 H6
I039 H3
I040 H4
I041 G9
I042 G9
I043 F9
I044 E9
I045 F9
I046 E9
I047 H4
I048 H5
I049 H7
I051 D7
I052 B7
I061 C5
I062 B5
I063 C6
I064 D5
I071 F10
I072 F13
I073 G11
I074 G11
I075 F10
I076 F12
I093 G2
I094 G2
c001 E5

Layout LED and Switch Panel (Top Side)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B
C
1040
3
1
6051
A
K
6060
6070
1020
6080
3104 313 6023.4
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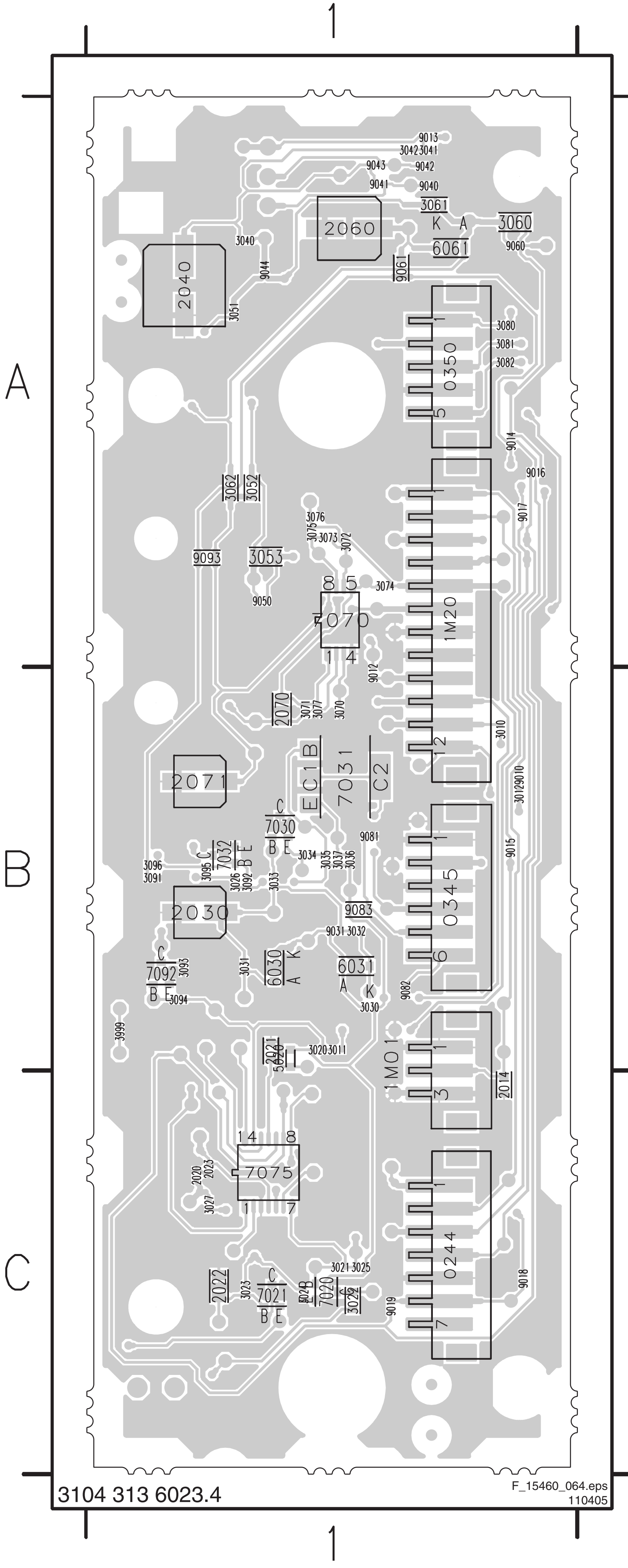
110405

1020	C1
1040	A1
6051	A1
6060	A1
6070	A1
6080	C1

Layout LED and Switch Panel (Bottom Side)


1
A
B
C
2060
2040
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6061
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2070
7031
2071
7030
7032
2030
9083
6030
6031
7092
0345
1M01
2014
7075
0244
2022
7021
7020
3104 313 6023.4
F_15460_064.eps
110405

0244	C1	9015	B1
0345	B1	9016	A1
0350	A1	9017	A1
1M01	B1	9018	C1
1M20	A1	9019	C1
2014	C1	9031	B1
2020	C1	9040	A1
2021	B1	9041	A1
2022	C1	9042	A1
2023	C1	9043	A1
2030	B1	9044	A1
2040	A1	9050	A1
2060	A1	9060	A1
2070	B1	9061	A1
2071	B1	9081	B1
3010	B1	9082	B1
3011	B1	9083	B1
3012	B1	9093	A1
3020	B1		
3021	C1		
3022	C1		
3023	C1		
3024	C1		
3025	C1		
3026	B1		
3027	C1		
3030	B1		
3031	B1		
3032	B1		
3033	B1		
3034	B1		
3035	B1		
3036	B1		
3037	B1		
3040	A1		
3041	A1		
3042	A1		
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3052	A1		
3053	A1		
3060	A1		
3061	A1		
3062	A1		
3070	B1		
3071	B1		
3072	A1		
3073	A1		
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3075	A1		
3076	A1		
3077	B1		
3080	A1		
3081	A1		
3082	A1		
3091	B1		
3092	B1		
3093	B1		
3094	B1		
3095	B1		
3096	B1		
3999	B1		
5020	B1		
6030	B1		
6031	B1		
6061	A1		
7020	C1		
7021	C1		
7030	B1		
7031	B1		
7032	B1		
7070	A1		
7075	C1		
7092	B1		
9010	B1		
9012	B1		
9013	A1		
9014	A1		

Personal Notes:

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131004

8. Alignments

Index of this chapter:

8.1 General Alignment Conditions
8.2 Hardware Alignments
8.3 Software Alignments
8.4 Option Settings

8.1 General Alignment Conditions

8.1.1 Start Conditions

Perform all electrical adjustments under the following conditions:

- Power supply voltage (depends on region):
  - **AP-NTSC:** 120 V_{AC} or 230 V_{AC} / 50 Hz (± 10%).
  - **AP-PAL-multi**: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - **EU**: 230 V_{AC} / 50 Hz (± 10%).
  - **LATAM-NTSC**: 120 - 230 V_{AC} / 50 Hz (± 10%).
  - **US**: 120 V_{AC} / 60 Hz (± 10%).
- Connect the set to the mains via an isolation transformer with low internal resistance.
- Allow the set to warm up for approximately 10 to 15 minutes.
- Measure voltages and waveforms in relation to chassis ground (with the exception of the voltages on the primary side of the power supply).
  Caution: never use heatsinks as ground.
- Test probe: Ri > 10 Mohm, Ci < 20 pF.
- Use an isolated trimmer/screwdriver to perform alignments.

8.1.2 Initial Settings

Perform all electrical adjustments with the following initial settings (via the "Active Control" button on the RC):

1. To avoid the working of the light sensor, set "Active Control" to "Off".
2. Set "Smart Picture" to "Eco/Natural".
3. Set "Active Display" to "Off"

8.1.3 Alignment Sequence

- First, set the correct options:
  - In SAM, select SERVICE OPTIONS -> OPT. NO,
  - Fill in the option settings according to the set sticker (see also paragraph "Option Settings"),
  - Select STORE OPTIONS and push "OK" on the remote control,
  - After storing, the set must be restarted!
- Warming up (> 10 minutes).
- White point alignment.

8.2 Hardware Alignments

No hardware alignments are necessary.

8.3 Software Alignments

Put the set in SAM mode (see the "Service Modes, Error Codes and Fault Finding" section). The SAM menu will now appear on the screen. Select ALIGNMENTS and go to one of the sub menus. The alignments are explained below.

Notes:

- All changes must be stored manually.
- If an empty EAROM (permanent memory) is detected, all settings are set to pre-programmed default values.

8.3.1 General

For the next alignments, supply the following test signals via a video generator to the RF input:

- **EU/AP-PAL** models: a PAL B/G TV-signal with a signal strength of at least 1 mV and a frequency of 475.25 MHz
- **US/AP-NTSC** models: an NTSC M/N TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).
- **LATAM** models: an NTSC M or PAL M TV-signal with a signal strength of at least 1 mV and a frequency of 61.25 MHz (channel 3).

Luma Gain
Fixed setting of "1".

Delta Luma Gain for Aux (only when a 2nd Tuner is present)
Fixed setting of "0 dB".

IF AFC
Alignment procedure:

1. During the IF AFC-parameter adjustment, one can see OSD feedback on the screen.
2. The OSD feedback can give four kinds of messages:
3. The first item ("IN/OUT") informs you whether you are in or out of the AFC-window.
4. The second item ("HIGH/LOW") informs you whether the AFC-frequency is too high or too low.

Table 8-1 AFC

AFC-window	AFC-frequency vs. reference
Out	High
In	High
[In]	[Low]
Out	Low

1. Adjust the IF AFC parameter until the **first** value is within the AFC window (= IN).
2. Next, adjust the IF AFC parameter until the **second** value is LOW.

IF LPRIME AFC (only for EU sets)
Same procedure as described above, but with SECAM L/L' signal source.

Tuner AGC
Measure the DC voltage on pin 1 of the (main) Tuner. You can adjust this voltage by adjusting the TUNER AGC item in the SAM menu. Alignment is correct when the DC voltage is just below 3.5 V.

IF AFC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under IF AFC) with the set switched to the DW source.

IF LPRIME AFC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under IF LPRIME AFC) with the set switched to the DW source.

Tuner AGC Tuner 2 (only when a 2nd Tuner is present)
Use the same procedure as described above (under TUNER AGC) with the set switched to the DW source. Measure on pin 1 of the DW Tuner.

Blend Intensity

Use this alignment when you replace the microcontroller, NVM, or the EBILD. It aligns the level of transparency of the menu-picture blended into the main-picture. Fixed setting of "16".

8.3.2 2FH ADC Alignment

Only necessary to align, when the A/D converter or NVM is replaced. Use the default values as mentioned in the table.

Table 8-2 “2fH ADC alignment”

Menu item	Value
Red Gain RGB	106
Blue Gain RGB	112
Green Gain RGB	133
Red Offset RGB	40
Blue Offset RGB	41
Green Offset RGB	43
Red Gain YPbPr *	115
Blue Gain YPbPr *	118
Green Gain YPbPr *	102
Red Offset YPbPr *	59
Blue Offset YPbPr *	56
Green Offset YPbPr *	35
* = only for sets with YPbPr input	

8.3.3 White Point

- Set ACTIVE CONTROL to "Off".
- In the TV -> PICTURE user menu set:
  - DYNAMIC CONTRAST to "Off".
  - COLOUR ENHANCEMENT to "Off".
  - DNR to "Off".
  - DIGITAL OPTIONS to "Pixel Plus 2".
  - CONTRAST to "100".
- Go to the SAM and select ALIGNMENTS -> WHITE POINT.

Method 1 (with colour analyser):

- Use a 100% white screen as input signal and set the following values:
  - COLOR TEMPERATURE: "Tint to be aligned".
  - WHITE POINT RED: "127".
  - WHITE POINT GREEN: "127".
  - WHITE POINT BLUE: "127".
  - RED BL OFFSET: "7"
  - GREEN BL OFFSET: "7".
- Measure with a calibrated (phosphor- independent) colour analyser (e.g. Minolta CA-210) in the centre of the screen. This measurement needs to be done in a dark environment.
- **Cut off alignment:** Adjust, by means of changing the value of one or both OFFSET's, to the correct x,y coordinates for the tint "NORMAL" (see table "White D alignment values"). Tolerance: dx,dy: ± 0.004.
- **White point alignment:** Adjust by means of decreasing the value of one or two white points, the correct x,y coordinates (see table "White D alignment values"). Tolerance: dx,dy: ± 0.004.
- Repeat this step for the other Colour Temperatures that need to be aligned.
- When finished press "Store" to store the aligned values to the NVM.

Table 8-3 White D alignment values

Colour Temp.	Cool	Normal	Warm
X	0.275	0.286	0.315
Y	0.291	0.301	0.335

Method 2 (without colour analyser):

If you do not have a colour analyser, you can use the default values. This is the next best solution. The default values are average values coming from production (statistics).

1. Select a COLOUR TEMPERATURE (e.g. COOL, NORMAL, or WARM).
2. Set the RED, GREEN and BLUE default values according to the values in the "Tint settings" table.
3. When finished press "Store" to store the aligned values to the NVM.

Table 8-4 Tint settings

	Cool		Normal		Warm	
	42"	50"	42"	50"	42"	50"
R	127	127	127	127	127	127
G	122	125	119	121	113	114
B	118	118	111	109	94	87

8.3.4 Lum. Del.

With this Luminance Delay alignment, you place the luminance information exactly on the chrominance information (brightness is pushed onto the colour). Use a colour bar / grey scale pattern as test signal.

- **LUM. DELAY PAL BG:** Apply a PAL BG colour bar / grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**7**".
- **LUM. DELAY PAL I:** Apply a PAL I colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**9**".
- **LUM. DELAY SECAM:** Apply a SECAM colour bar/grey scale pattern as a test signal. Adjust this parameter until the transients of the colour part and black and white part of the test pattern are at the same position. Default value is "**9**".
- **LUM. DELAY BYPASS:** apply a NTSC colour bar/grey scale pattern as a test signal. Adjust this value until the transients of the colour and black and white part of the test area are at the same position. Default value is "**6**".

8.4 Option Settings

8.4.1 Introduction

The microprocessor communicates with a large number of I^{2}C ICs in the set. To ensure good communication and to make digital diagnosis possible, the microprocessor has to know which ICs to address. The presence / absence of these specific ICs (or functions) is made known by the option codes.

Notes:

- After changing the option(s), save them with the STORE command.
- The new option setting is only active after the TV is switched "off" and "on" again with the Mains switch (the EAROM is then read again).

8.4.2 Dealer Options

Table 8-5 Dealer options

Menu name	Subjects	Options	Description
Personal Options	Picture Mute	Yes	Picture (blue) mute active in case no picture detected
		No	Noise in case of no picture detected
	Virgin Mode	Yes	TV starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
		No	TV does not starts up (once) with language selection menu after mains switch "on" for the first time (virgin mode)
	Auto Store Mode (only valid for EU and AP-PAL sets)	None	Autostore mode disabled (not in installation menu)
		PDC-VPS	Autostore mode via ATS (PDC/VPS) enabled
		TXT page	Autostore mode via ACI enabled
		PDC-VPS-TXT	Autostore mode via ACI or ATS enabled
	TXT Preference (only valid for EU and AP-PAL sets)	TOP	Preference to TOP Teletext
		FLOF	Preference to FLOF Teletext
	DVD door lock (only valid for sets with integrated DVD)	Yes	To disable the DVD tray opening function
		No	To enable the DVD tray opening function
	AmbiLight Demo	Yes	AmbiLight demo via "MENU" button enabled
		No	AmbiLight demo via "MENU" button disabled

8.4.3 Service Options

Select the sub menu's to set the initialisation codes (options) of the set via text menus.

Table 8-6 Service options

Menu-item	Subjects	Options	Description
Dual Screen	PIP/Dual Screen	Yes / No	Feature present / not present
	Text/EPG	Yes / No	Feature present / not present
	DS/PIP Tuner	Yes / No	Feature present / not present (only selectable if Dual Screen option is "on")
Teletext	Flash RAM (if present)	Yes / No	Flash RAM present / not present
	NexTView type	None	Feature not present
		Textguide only	Feature present, but only as text guide
		Nextview 2c3	Feature present, for countries that support NexTView
Display	Screen	Value "000"	42 inch PDP SDI
		Value "001"	50 inch PDP SDI
		Value "002"	42 inch PDP FHP
		Value "003"	30 inch LCD LPL
		Value "004"	37 inch LCD LPL
		Value "005"	42 inch LCD LPL
		Value "006"	32 inch LCD Sharp
		Value "007"	42 inch PDP SDI VGA
		Value "008"	37 inch PDP FHP
Video Repro	Feature box type	1050i/1250i	HD input
		Eagle 1B	"Eagle version 1B" present (Pixel Plus 1)
		Eagle 1C	"Eagle version 1C" present (Pixel Plus 2)
	Lightsensor	Yes / No	Feature present / not present
	3D Comb filter	Yes / No	Only selectable when Columbus is present
	Impr. Noise Red.	Yes / No	Only selectable when Columbus is present
	Pixel Plus Version	1	Standard PP: only selectable with Eagle 1C
		2	Improved PP: only selectable with Eagle 1C
	720p	Yes / No	Enable for high resolution displays
Source Selection	EXT3 1Fh (2003)	Yes / No	Not selectable
Audio Repro	Acoustic System	FTV Top	Cabinet design (xxPF9986 and xxPF9996 with NXT)
		Soft Wrap	Cabinet design (xxPF9956 and xxPF9966 stdrd)
		Wrap	Cabinet design (xxPF9956 and xxPF9966 stdrd)
		FTV2.3	Cabinet design (for future)
	AVL	On / Off	Enable / disable Automatic Volume Limiter
Miscellaneous	Home Cinema	Yes / No	Model with / without Home Cinema Link (EU only)
	Dimming Backlight	Yes / No	Enable / disable dimming backlight (not implemented yet)
	Integrated RC	Yes / No	Control pheripheral equipment via TV IR receiver (EU only)
	Tuner type	UV1316 / TEDE9	Model with Philips tuner / Alps tuner
	P50 DVD menu line	Yes / No	Enable / disable DVD control via user menu with TV RC (EU only)
	Hotel Mode	Yes / No	Enable / disable hotel mode
Option no.	Group 1		Group 1 option code overview (see set sticker)
	Group 2		Group 2 option code overview (see set sticker)

8.4.4 Opt. No. (Option numbers)

Select this sub menu to set all options at once (expressed in two long strings of numbers).

Table 8-7 Option number overview (subject to change)

Model Number	12 NC	Options Group 1	Options Group 2
42PF9966/12	8670 000 20646	62708 40992 49472 00000	05142 01537 00064 00065
42PF9966/10	8670 000 21597	62708 40992 49472 00000	05142 01537 00064 00065
50PF9966/12	8670 000 20653	62708 40992 49472 00000	04118 00513 00064 00065
50PF9966/10	8670 000 21598	62708 40992 49472 00000	05142 01537 00064 00065

An option number (or "option byte") represents a number of different options. When you change these numbers directly, you can set all options very quickly. All options are controlled via eight option numbers.
When the EAROM is replaced, all options will require resetting. To be certain that the factory settings are reproduced exactly, you must set both option number lines. You can find the correct option numbers on a sticker inside the TV set.

Example: The options sticker gives the following option numbers:

- 62708 40992 49472 00000
- 04118 00513 00064 00065

The first line (group 1) indicates hardware options 1 to 4, the second line (group 2) indicates software options 5 to 8.
Every 5-digit number represents 16 bits (so the maximum value will be 65536 if all options are set).
When all the correct options are set, the sum of the decimal values of each Option Byte (OB) will give the option number.
See next table for the option overview.

Table 8-8 Option overview

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
1	0 (1)	Video Repro	Feauture Box Type	3= Eagle 1B, 4= Eagle 1C, 5= 1050i/1250i	
	1 (2)				
	2 (4)				
	3 (8)	Personal	Ambi Light Demo	0= Off, 8= On	
	4 (16)	Video Repro	Auto Scavem	0= No, 16= Yes	Only selectable for CRT sets.
	5 (32)		Improv. Noise Reduction	0= No, 32= Yes	Fixed to "Yes" in case Columbus is present
	6 (64)		Light Sensor	0= No, 64= Yes	
	7 (128)	Miscellaneous	Ambi Light	0= No, 128= Yes	
	8 (256)	Video Repro	Digital Option	0 (No)= Dig. Natural Motion (for PP1) or PixelPlus (for PP2), 256 (Yes)= PixelPlus (for PP1) or PixelPlus2 (for PP2)	This depends on the "Pixel Plus Version" option (see also Byte 1 - bit 14), and gives the info that is visible in the user menu.
	9 (512)		n.a.		
	10 (1024)	Source Selection	1152i	0= Off, 1024= On	
	11 (2048)	Video Repro	n.a.		
	12 (4096)		Signalling Bits	0= No, 4096= Yes	Fixed to: "Yes" in EU and AP-P, "No" for other versions.
	13 (8192)		3D Comb Filter	0= No (2D Comb), 8192= Yes (3D Comb)	
	14 (16384)		PP (Pixel Plus) Version	0= “1”, 16384= “2”	Only selectable when "Feature Box" option is "Eagle 1C". See also Byte 1- bit 8 "Digital Option".
	15 (32768)		720p	0= No, 32768= Yes	
2	0 (1)	Audio Repro	n.a.		
	1 (2)		Dolby Pro Logic	0= No, 2= Yes	
	2 (4)		Virtual Rear Speakers	0= No, 4= Yes	Fixed to: "Yes" for sets with Dolby Pro Logic.
	3 (8)		Cordless Rear Speakers	0= No, 8= Yes	Fixed to: "No" for all versions, except for EU.
	4 (16)		Dolby Digital	0= No, 16= Yes	When Dolby Digital is "Yes", the AVL (Byte 8 - bit 6) option must be "No".
	5 (32)		Virtual Dolby	0= No, 32= Yes	Fixed to: "No" in case the "Dolby Pro Logic" option (Byte 2 - Bit 1) unequals "none".
	6 (64)		Subwoofer	0= No Subwoofer present, 64= Subwoofer present.	
	7 (128)				
	8 (256)	Chassis/Region	Chassis	0= EM6, 256= EM5, 512 = EM3	FTx2.x= EM6
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)	Teletext	n.a.		
	13 (8192)		Flash RAM	0= No, 8192= Yes	NexTView type 2C3 and 2 need a Flash RAM.
	14 (16384)		NexTView type	0= None, 16384= Textguide only, 32768= NexTView 2C3, 49152= NexTView 2	Only available for EU.
	15 (32768)				
3	0 (1)	n.a.	n.a.		
	1 (2)	n.a.	n.a.		
	2 (4)	n.a.	n.a.		
	3 (8)	n.a.	n.a.		
	4 (16)	Dual Screen	PIP/Dual Screen	0= No, 16= Yes	
	5 (32)		n.a.		
	6 (64)		TXT/EPG Dual Screen	0= No, 64= Yes.	Fixed to: "Off" for AP-N, US, and LA versions.
	7 (128)		n.a.		
	8 (256)	Display	CRT type (Aspect Ratio)	0= 4:3, 256= 16:9	
	9 (512)		Picture Rotation	0= No, 512= Yes	Only selectable for CRT sets.
	10 (1024)		Monitor	0= No, 1024= Yes	Reserved for Flat TV monitor.
	11 (2048)	Miscellaneous	Integrated Radio	0= No, 2048= Yes	
	12 (4096)		Stand Alone	0= No, 4096= Yes	Reserved for Flat TV monitor.
	13 (8192)		Integrated DVD	0= No, 8192= Yes	
	14 (16384)		Home Cinema	0= No, 16384= Yes	Fixed to: "No" in all versions except for EU.
	15 (32768)		Integraded RC	0= No, 32768= Yes	Fixed to: "No" in all versions except for EU.
4	0 (1)	Dual Screen	DS/PIP (Aux) Tuner	0= Aux Tuner not present, 1= Aux Tuner present	Only selectable in the EU version, provided the "PIP/Dual Screen" option is "Yes".
	1 (2)		DS/PIP (Aux) Tuner Type	0= UV1316, 2= TEDE9	
	2 (4)	Miscellaneous	38.0 (or China) IF	0= No, 4= Yes	Fixed to: "No" in all versions except for AP-P.
	3 (8)		Tuner Type	0= UV1316, 8= TEDE9	
	4 (16)	Teletext	n.a.		
	5 (32)		n.a.		
	6 (64)		n.a.		
	7 (128)		n.a.		
	8 (256)	Miscellaneous	Integrated Dig. Module	0= No, 256= Yes	
	9 (512)		Integrated HDD	0= No, 512= Yes	
	10 (1024)		n.a.		
	11 (2048)		n.a.		
	12 (4096)		Anti Aging	0= No, 4096= Yes	Fixed to: "Yes" for FTV.
	13 (8192)	Personal	DVD Door Lock	0= No, 8192= Yes	
	14 (16384)		n.a.		
	15 (32768)		n.a.		

Byte	Bit (dec. value)	Subject	Options	Settings (in decimal values)	Remarks
5	0 (1)	Personal	n.a.		
	1 (2)		Auto Store Mode	0= None, 2= PDC/VPS, 4= TXT Page, 6= PDC/VPS/TXT Page	Fixed to: "None" in the AP-N and US versions.
	2 (4)				
	3 (8)		2CS Korea	0= BTSC, 8= Korean Stereo	As the MSP can not automatically detect if Korean stereo (2CS) or BTSC is transmitted, this option is needed to tell the MSP what detection should be done.
	4 (16)		Blue (or Picture) Mute	0= No, 16 = Yes	
	5 (32)		n.a.		
	6 (64)		Virgin Mode	0= No, 64= Yes	
	7 (128)	Miscellaneous	Hotel Mode	0= No, 128= Yes	
	8 (256)	Personal	Flex TV Demo	0= No, 256= Yes	
	9 (512)		n.a.		
	10 (1024)		n.a.		
	11 (2048)		n.a.		
	12 (4096)		TXT Preference	0= Top, 4096= FLOF	Only available in the EU version.
	13 (8192)		n.a.		
	14 (16384)		n.a.		
	15 (32768)		n.a.		
6	0 (1)	Miscellaneous	P50 DVD Menu Line	0= No, 1= Yes	Fixed to: "No" in all versions except for EU.
	1 (2)		n.a.		
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)	Chassis/Region	Region	0= EU, 16= AP-P, 32= AP-N, 48= US, 64= Latam, 80= Australia	
	5 (32)				
	6 (64)				
	7 (128)				
	8 (256)	Display	Screen	"000" (0)= 42-inch PDP (SDI), "001" (256)= 50-inch PDP (SDI), "002" (512)= 42-inch PDP (FHP), "003" (768)= 30-inch LCD (LPL), , "004" (1024)= 37-inch LCD (LPL), "005" (1280)= 42-inch LCD (LPL), "006" (1536)= 32-inch LCD (Sharp), "007" (1792)= 42-inch PDP (SDI) VGA, "008" (2048)= 37-inch PDP (FHP).	Fixed to "0" in case of CRT.
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)				
	13 (8192)				
	14 (16384)				
	15 (32768)				
7	0 (1)	Source Selection	EXT4 1fH	0= No, 1= Yes	
	1 (2)		EXT1 2fH	0= No, 2= Yes	
	2 (4)		n.a.		
	3 (8)		n.a.		
	4 (16)		n.a.		
	5 (32)		EXT3 1fH	0= No, 32= Yes	
	6 (64)		DVI/VGA	0= No, 64= Yes	
	7 (128)		HDMI (Europe)	0= No, 128= Yes	
	8 (256)		AV3 1fH	0= No, 256= Yes	
	9 (512)		AV1 2fH	0= No, 512= Yes	
	10 (1024)		AV2 2fH	0= No, 1024= Yes	
	11 (2048)		n.a.		
	12 (4096)		n.a.		
	13 (8192)		n.a.		
	14 (16384)		n.a.		
	15 (32768)		HDMI (Non- Europe)	0= No, 32768= Yes	
8	0 (1)	Audio Repro	Acoustic System	0= FTV-Top (499), 1= Soft Wrap (496, 498), 2= Wrap (496, 498), 3= FTV2.3 (505), 4= FL9 Monitor (n.a.), 5= FL10 (n.a.), 6= FL11 or FL11-upgr. (380, 382, 406, 425, 426, 534), 7= FL12 (296, 305, 395, 408, 428, 444), 8= FL14 (n.a.), 9= PV02 (462), 10= FL13A (456), 11= Soft Design Line (336, 383), 12= Tech Design Line (419), 14= FL13B (456), 15= Others	Used for setting dynamic audio parameters. Between brackets the styling numbers are mentioned as listed in the quarterly Product Survey.
	1 (2)				
	2 (4)				
	3 (8)				
	4 (16)	Miscellaneous	n.a.		
	5 (32)		Intelligent Lights	0= No, 32= Yes	
	6 (64)	Audio Repro	AVL	0= No, 64= Yes	Switch to "No" when Dolby Digital is present.
	7 (128)		1080i Screen	0= 2fH path, 128= 3fH path	
	8 (256)	Display	CRT Size	0= 28", 256= 32", 512= 36" MEC, 768= 29", 1024= 34", 1280= 38", 1536= 28" Mk2, 1792= 36" PH, 2048= 32" MEC, 2304= 32" PH, 2560= 30", 2816= 37", 3072= 42", 3328= 50", 3840= Others	
	9 (512)				
	10 (1024)				
	11 (2048)				
	12 (4096)		Anti Moire Filter	0= No, 4096= Yes	Only for CRT
	13 (8192)		Display Type	0= LCD (LPL), 8192= PDP, 16384= CRT, 24576= LCoS, 32768= PTV, 40960= LCD (AUO), 49152= LCD (Sharp)	
	14 (16384)				
	15 (32768)				

9. Circuit Descriptions, Abbreviation List, and IC Data Sheets

Index of this chapter:

9.1 Introduction
9.2 Abbreviation List

Note:
Only **new** (not recently published) circuits are described here. As this chassis does not contain any really new circuits, use the FTP2.2x manual for the circuit descriptions.

9.1 Introduction

This chassis contains, compared to its predecessor, the following **new/changed** features/components:

- **Small Signal Board** (SSB). Small layout changes and new software to support the 720p feature.
- **Dual Ambient Light inverter panels**: To reduce the heat dissipation and improve the efficiency, two separate CCFL inverter panels are introduced in some models.

The chassis consists of a full sized SSB, a Power Supply, and some smaller PWBs for Audio, I/O, and Control functions. The main functionalities are:

- **Power Supply**:
  - For **FHP** displays, this is an LLC power supply, based on the one used in the earlier plasma monitors (FMxx chassis). This supply (single sided) is built up very conventional, with hardly any surface mounted components on the copper side.
  - For **SDI** displays, this is a "black box" for Service (board/module swap).
- **SSB**: Core TV functionalities, being TXT/control, video and audio decoding, feature box, video featuring, and sync/geometry control. The SSB is a high tech module (four layer, 2 sides reflow technology, full SMC) with very high component density and full shielding for EMC-reasons. Despite this, it is designed in such a way, that repair on component level is possible. To achieve this, attention was paid to:
  - Clearance around surface mounted ICs (for replacing).
  - Detailed diagnostics and fault finding is possible via ComPair.
  - Software upgrading (only for main software) is possible via ComPair.

9.2 Abbreviation List

1080i	1080 visible lines, interlaced
1080p	1080 visible lines, progressive scan
2DNR	Spatial (2D) Noise Reduction
3DNR	Temporal (3D) Noise Reduction
AARA	Automatic Aspect Ratio Adaptation: algorithm that adapts aspect ratio to remove horizontal black bars; keeping up the original aspect ratio
ACI	Automatic Channel Installation: algorithm that installs TV sets directly from cable network by means of a predefined TXT page
ADC	Analogue to Digital Converter
AFC	Automatic Frequency Control: control signal used to tune to the correct frequency
AGC	Automatic Gain Control: algorithm that controls the video input of the feature-box
AM	Amplitude Modulation
ANR	Automatic Noise Reduction: one of the algorithms of Auto TV
AR	Aspect Ratio: 4 by 3 or 16 by 9
Artistic	See OTC 2.5: main processor
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars but without throwing away video information
ATV	See Auto TV
AUDIO_C	Audio Centre
AUDIO_L	Audio Left
AUDIO_R	Audio Right
AUDIO_SL	Audio Surround Left
AUDIO-SR	Audio surround right
AUDIO_SW	Audio Sub woofer
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz. B= VHF-band, G= UHF-band
B-SC1-IN	Blue SCART1 in
B-SC2-IN	Blue SCART2 in
B-TXT	Blue teletext
CL	Constant Level: audio output to connect with an external amplifier
ComPair	Computer aided rePair
CSM	Customer Service Mode
CTI	Colour Transient Improvement: manipulates steepness of chroma transients
CVBS	Composite Video Blanking and Synchronisation
CVBS-TER	CVBS terrestrial
COLUMBUS	COLour LUMinance Baseband Universal Subsystem. IC performing noise reduction and 2D/3D comb filtering
DAC	Digital to Analogue Converter
DBE	Dynamic Bass Enhancement: extra low frequency amplification
DDC	Display Data Channel; is a part of the "Plug and Play" feature
DFU	Direction For Use: description for the end user
D/K	Monochrome TV system. Sound carrier distance is 6.5 MHz. D= VHF-band, K= UHF-band

DNR	Digital Noise Reduction: noise reduction feature of the box
DPL	Dolby ProLogic
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for dealers to enter e.g. service mode
DVD	Digital Versatile Disc
DVI(-d)(-i)	Digital Visual Interface (d= digital only) (i= integrated); a digital video interface to a display, designed to replace the analogue YPbPr or RGB interface
Eagle	Feature box IC performing peaking, zooming and sub pixel LTI in both horizontal and vertical direction, CTI and other colour features
EDID	Extended Display Identification Data (VESA standard)
EEPROM	Electrically Erasable and Programmable Read Only Memory
EHT	Extra High Tension
EPG	Electronic Program Guide: system used by broadcasters to transmit TV guide information (= NexTView)
EPLD	Erasable Programmable Logic Device
EU	EUrope
EXT	External (source), entering the set via SCART or via cinches
FALCONIC	SAA4992H, Feature Box IC performing Digital Natural Motion, 3DNR, and vertical zoom and vertical peaking
FBL	Fast Blanking: DC signal accompanying RGB signals
FBL-PIP	The fast blanking signal for PIP
FBL-TXT	The fast blanking signal for TXT. It has a higher priority than FBL-PIP
FBX	Feature Box: part of small signal / separate module which contains 100 Hz processing, extra featuring and AutoTV algorithms (FBX6= based on PICNIC, FBX7= based on PICNIC and Eagle)
FDS	Full Dual Screen
FEM	Falconic Embedded Memory; IC (SAA4998H) that is the successor of the SAA4993H with jagged line removal and embedded memory
FHP	Fujitsu Hitachi Plasma display Ltd.
FLOF	Full Level One Features, TXT standard
FLASH	Flash memory
FM	Field Memory or Frequency Modulation
G-TXT	Green teletext
HA	Horizontal Acquisition: horizontal sync pulse coming out of the HIP
HD at HOME	A signal from the OTC, to switch the HOP to the Pixel Plus standard (75 Hz frame)
HIP	High-end video Input Processor (TDA9320): video and chroma decoder of EM5E
HP	Head phone
I	Monochrome TV system. Sound carrier distance is 6.0 MHz. VHF- and UHF-band
I/O	Input/Output
I^2C	Inter IC bus (also called IIC)
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker
Last Status	The settings last chosen by the customer, read, and stored in RAM or in the NVM. They are called at start-up of the set to configure it according the customers wishes
LCD	Liquid Crystal Display
LPL	LG-Philips LCD
LED	Light Emitting Diode
L/L'	Monochrome TV system. Sound carrier distance is 6.5 MHz. L' is Band I, L is all bands except for Band I
LNA	Low Noise Adapter
LORE	LOcal REgression based noise reduction
LSP	Large signal panel
LVDS	Low Voltage Differential Signalling; Data transmission system for high speed and low EMI communication
M/N	Monochrome TV system. Sound carrier distance is 4.5 MHz. M= 525 lines @ 60 Hz, N= 625 lines @ 50 Hz
MUTE	Mute-Line
NC	Not Connected
NICAM	Near Instantaneously Companded Audio Multiplexing; This is a digital sound system, mainly used in Europe
NTSC	National Television Standard Committee; Colour system mainly used in North America and Japan. Colour carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non Volatile Memory: IC containing TV related data e.g. alignments
O/C	Open Circuit
OSD	On Screen Display
OTC	On screen display Teletext and Control; also named Artistic (SAA5800)
P50	Project 50 communication: protocol between TV and peripherals
PAL	Phase Alternating Line; Colour system mainly used in West Europe (colour carrier= 4.433619 MHz) and South America (colour carrier PAL M= 3.575612 MHz and PAL N= 3.582056 MHz)
PCB	Printed Circuit Board
PDP	Plasma Display Panel
PFC	Power Factor Corrector (or Pre-conditioner)
PICNIC	Peripheral Integrated Combined Network IC (SAA4978): main IC for 100 Hz featuring and feature processing
PIP	Picture In Picture
PLL	Phase Locked Loop; Used for e.g. FST tuning systems. The customer can directly provide the desired frequency
POR	Power On Reset; Signal to reset the µP
Progressive Scan	Scan mode where all scan lines are displayed in one frame at the same time, creating a double vertical resolution.
PSU	Power Supply Unit
PWB	Printed Wiring Board
RAM	Random Access Memory
R-TXT	Red teletext
RC	Remote Control
RC5 / RC6	Signal protocol from the remote control receiver
RESET	Reset signal

RGB	Red, Green, and Blue colour space; The primary colour signals for TV. By mixing levels of R, G, and B, all colours (Y/C) are reproduced
RGBHV	Red, Green, Blue, Horizontal sync, and Vertical sync
ROM	Read Only Memory
SAM	Service Alignment Mode
S/C	Short Circuit
SCL-F	Clock signal on fast I^2C bus
SD	Standard Definition
SDA-F	Data signal on fast I^2C bus
SDI	Samsung Display Industry
SECAM	SÉquence Couleur Avec Mémoire; Colour system mainly used in France and East Europe. The chroma is FM modulated and the R-Y and B-Y signals are transmitted line sequentially. Colour carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMD	Surface Mounted Device
SMPS	Switched Mode Power Supply
SNERT	Synchronous No parity Eight bit Reception and Transmit
SSB	Small Signal Board
STBY	Stand-by
SW	Sub woofer
SVGA	800x600 (4:3)
SVHS	Super Video Home System
TMDS	Transition Minimised Differential Signalling
TOP	Table Of Pages; TXT standard
TXT	Teletext
uP	Microprocessor
UV	Colour difference signals
UVSH	UHF, VHF, S-, and Hyper-band
VA	Vertical Acquisition
V-a	Addressing voltage for the plasma display
VDS	Virtual Dolby Surround
VESA	Video Electronics Standards Association
VFB	Vertical Flyback Pulse: vertical sync pulse coming from the Feature Box
VGA	Video Graphics Array; 640x480 (4:3)
VL	Variable Level out: processed audio output towards external amplifier
V-ra	Setting voltage for V_a
V-rs	Setting voltage for V_s
V-s	Sustain voltage for the plasma display
WSS	Wide Screen Signalling; used by broadcasters to transmit e.g. PALPLUS and 16:9 Aspect Ratio
WXGA	Wide eXtended Graphics Array; 1280x768 (15:9) or 1366x768 (16:9)
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
XGA	Extended Graphics Array; 1024x768 (4:3)
XTAL	Quartz crystal
Y	Luminance signal
Y100	Y from Feature Box
YPbPr	This is a scaled version of the YUV colour space. Y= Luminance, Pb/Pr= Colour difference signals B-Y and R-Y, other amplitudes w.r.t. to YUV
Y-OUT	Luminance-signal to HOP IC
YUV	Colour space used by the NTSC and PAL video systems. Y is the luminance and U/V are the colour difference signals

10. Spare Parts List

Set Level

Various

0271	3104 303 12091	Thermal foam block
1004⚠	8204 000 78201	S50HW-XD04 (SDI)
1004⚠	9322 224 77682	FPF42C128128UD(FHP)
1088	3104 328 39552	CCFL inverter panel
1089	3104 328 39552	CCFL inverter panel
1175	2722 171 00259	Ambi light 500L (42”)
1175	2722 171 00263	Ambi light 600R (50”)
1176	2722 171 00257	Ambi light 500R (42”)
1176	2722 171 00261	Ambi light 600R (50”)
5213	2441 257 10002	Loudspeaker 8Ω 15W
5214	2441 257 10002	Loudspeaker 8Ω 15W
5215	2441 257 10003	Loudspeaker passive
5216	2441 257 10003	Loudspeaker passive
8202	3104 311 08651	Cable 9p/340/9p
8250	3104 311 08081	Cable 31p/350/30p
8250	3104 311 08841	Cable 31p/220/31p
8302	3104 311 08931	Cable 7p/1000/7p
8302	3104 311 10121	Cable 7p/280/7p
8310	3104 311 08671	Cable 4p/250/4p
8310	3104 311 10641	Cable 4p/820/4p
8323	3104 311 10361	Cable 10p/280/10p
8508	3104 311 10651	Cable 4p/1000/4p
8548	3104 311 10661	Cable 3p/1300/3p
8735	3104 311 09471	Cable 2p/1600/2p
8735	3104 311 10111	Cable 2p/1600/2p
8736	3104 311 09721	Cable 2p/820/2p
8736	3104 311 09851	Cable 2p/1700/2p
8911	3104 311 07911	Cable ring/180/ring

PDP Supply for FHP 42” [A]

Various

1004⚠	9965 000 07788	Fuse 2A T 250V
1082⚠	4822 071 52502	Fuse 2.5A
1083⚠	4822 071 52502	Fuse 2.5A
1084⚠	2422 086 10849	Fuse 1A F 250V
1110⚠	4822 071 55002	Fuse 5A T 250V
1200⚠	9965 000 07788	Fuse 2A T 250V
1260⚠	4822 252 51186	Fuse 2A
1400⚠	4822 253 30467	Fuse 6.3A
1402⚠	4822 252 60151	Surge protect
1450⚠	4822 280 10382	SDT-SS-109DM
1460⚠	4822 280 10382	SDT-SS-109DM
1M05	2422 025 16374	Connector 2p m
1M10	2422 025 09406	Connector 4p m

⊣⊢

2000⚠	2252 811 95017	470pF 10% 250V
2001⚠	2222 338 22474	470nF 20% 275V
2005	2238 867 18101	100pF 1% 50V 0603
2006	2020 552 96618	1nF 10% 50V 0402
2007	2238 586 59812	100nF 20% 50V 0603
2008	5322 126 11583	10nF 10% 50V 0603
2010	5322 126 11583	10nF 10% 50V 0603
2011	2222 375 24153	15nF 5% 1kV
2012	4822 126 11254	330pF 10% 2kV
2013	4822 126 11254	330pF 10% 2kV
2014	4822 126 13862	1.5nF 10% 2kV
2015	5322 126 11583	10nF 10% 50V 0603
2017	2222 375 24153	15nF 5% 1kV
2018	2238 867 18101	100pF 1% 50V 0603
2019⚠	2252 811 95017	470pF 10% 250V
2020	2020 024 90737	3300µF 20% 100V
2021	2020 024 90737	3300µF 20% 100V
2022	2020 021 91354	1000µF 20% 50V
2023	2222 580 15649	100nF 10% 50V 0805
2024	3198 035 03320	3.3nF 5% 50V 0402
2025	4822 124 12084	1µF 20% 50V
2026	2020 552 96623	2.2nF 10% 50V 0402
2027	2020 552 96631	15nF 10% 16V 0402
2028	2238 930 11541	220pF 5% 200V
2029	2238 930 11541	220pF 5% 200V
2030	2238 586 59812	100nF 20% 50V 0603
2031	2020 552 96628	10nF 10% 16V 0402
2032	2238 586 15641	22nF 10% 50V 0603
2033	2238 586 59812	100nF 20% 50V 0603
2034	4822 126 14525	47pF 5% 1kV
2035	2020 552 96618	1nF 10% 50V 0402
2036	2238 586 15641	22nF 10% 50V 0603
2037	4822 126 14525	47pF 5% 1kV
2038	2020 552 96618	1nF 10% 50V 0402
2039	2020 552 96623	2.2nF 10% 50V 0402
2040	3198 034 02790	47pF 1% 50V 0402
2041	2238 869 15101	100pF 5% 50V 0402
2042	3198 035 03310	330pF 5% 50V 0402
2043	4822 124 12084	1µF 20% 50V
2044	2238 930 11541	220pF 5% 200V
2045	2238 930 11541	220pF 5% 200V
2046	2252 568 08305	33pF 5% 500V
2047	2238 586 59812	100nF 20% 50V 0603
2048	2020 552 96683	220nF 10% 50V
2049	2238 867 18101	100pF 1% 50V 0603
2050	2238 586 15641	22nF 10% 50V 0603
2051	4822 122 33177	10nF 20% 50V
2052	4822 124 12056	1000µF 20% 35V
2053	2022 031 00308	22µF 20% 35V
2054	2238 869 15221	220pF 1% 50V 0402
2055	2020 552 96621	1.5nF 10% 50V 0402
2056	2238 869 15221	220pF 1% 50V 0402
2057	2020 552 96621	1.5nF 10% 50V 0402
2058	4822 124 41828	1µF 20% 250V
2059	2238 586 59812	100nF 20% 50V 0603
2060	2020 552 96683	220nF 10% 50V
2061	2238 586 59812	100nF 20% 50V 0603
2070	2020 552 96618	1nF 10% 50V 0402
2071	2020 552 96618	1nF 10% 50V 0402
2111	2238 869 15221	220pF 1% 50V 0402
2112	2020 552 96618	1nF 10% 50V 0402
2113	4822 124 12379	220µF 25V
2114	2020 552 96683	220nF 10% 50V
2118	4822 126 13449	1nF 10% 2kV
2121	2020 024 90736	2200µF 20% 100V
2122	4822 121 51319	1µF 10% 63V
2123	3198 035 03320	3.3nF 5% 50V 0402
2126	2238 586 59812	100nF 20% 50V 0603
2133	4822 124 81151	22µF 50V
2203	2238 586 59812	100nF 20% 50V 0603
2210	4822 124 80151	47µF 16V
2211	3198 035 04710	470pF 50V 0402
2212	2020 552 96326	220nF 10% 16V
2213	3198 035 14720	4.7nF 5% 25V 0402
2214	3198 035 14720	4.7nF 5% 25V 0402
2215	3198 035 04710	470pF 50V 0402
2218	2222 375 90141	3.3nF 1.6kV 5%
2222	2238 869 15101	100pF 5% 50V 0402
2223	2238 869 15101	100pF 5% 50V 0402
2225	2020 021 91551	2200µF 20% 25V
2226	2238 586 59812	100nF 20% 50V 0603
2227	2238 869 15101	100pF 5% 50V 0402
2229	2020 021 00036	470µF 20% 16V
2230	2020 021 00036	470µF 20% 16V
2231	4822 124 80151	47µF 16V
2232	2238 869 15101	100pF 5% 50V 0402
2234	2022 552 05679	1µF 10% 16V 0805
2236	4822 124 23002	10µF 16V
2237	4822 124 23002	10µF 16V
2263	2222 861 15272	2.7nF 5% 50V 0805
2264	4822 126 14583	470nF 10% 16V 0805
2265	3198 035 03310	330pF 5% 50V 0402
2267	5322 122 32531	100pF 5% 50V
2268	2020 552 96683	220nF 10% 50V
2269	4822 123 14025	2200µF 20% 16V
2270	4822 124 40433	47µF 20% 25V
2273	2238 586 59812	100nF 20% 50V 0603
2274	2020 552 96628	10nF 10% 16V 0402
2290	5322 126 11583	10nF 10% 50V 0603
2291	3198 035 04710	470pF 50V 0402
2293	3198 035 04710	470pF 50V 0402
2295	3198 035 04710	470pF 50V 0402
2296	3198 035 04710	470pF 50V 0402
2304	2020 552 96618	1nF 10% 50V 0402
2305	2238 586 59812	100nF 20% 50V 0603
2306	2238 586 59812	100nF 20% 50V 0603
2322	2238 586 59812	100nF 20% 50V 0603
2324	2238 586 59812	100nF 20% 50V 0603
2350	4822 124 12095	100µF 20% 16V
2352	2238 586 59812	100nF 20% 50V 0603
2364	2238 586 59812	100nF 20% 50V 0603
2376	2238 586 59812	100nF 20% 50V 0603
2377	2238 586 59812	100nF 20% 50V 0603
2381	2238 586 59812	100nF 20% 50V 0603
2397	4822 124 12095	100µF 20% 16V
2398	4822 124 23002	10µF 16V
2400⚠	2222 338 22474	470nF 20% 275V
2401⚠	2222 338 22474	470nF 20% 275V
2404	4822 126 14525	47pF 5% 1kV
2405⚠	2252 811 95017	470pF 10% 250V
2406	4822 126 14525	47pF 5% 1kV
2407⚠	2252 811 95017	470pF 10% 250V
2465	4822 124 12095	100µF 20% 16V
2502	2238 869 15101	100pF 5% 50V 0402
2503	2020 024 90708	47µF 400V 20%
2504	2020 552 96618	1nF 10% 50V 0402
2505	4822 124 12056	1000µF 20% 35V
2507	2238 869 15101	100pF 5% 50V 0402
2508	4822 124 12095	100µF 20% 16V
2509	2238 869 15101	100pF 5% 50V 0402
2510	2020 021 91506	1000µF 20% 16V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2222 580 15649	100nF 10% 50V 0805
2532	4822 124 12095	100µF 20% 16V
2533	4822 124 12095	100µF 20% 16V
2534	2022 552 05679	1µF 10% 16V 0805
2540	4822 124 12095	100µF 20% 16V
2541	4822 124 12095	100µF 20% 16V
2600	4822 122 33799	1nF 10% 1kV
2601	4822 122 33799	1nF 10% 1kV
2602	2020 552 96623	2.2nF 10% 50V 0402
2603	2222 383 90136	1µF 5% 400V
2605	2222 383 90136	1µF 5% 400V
2608	2020 552 96618	1nF 10% 50V 0402
2610	4822 121 70584	1.8nF 5% 2kV
2611	4822 126 12263	220pF 10% 2kV
2612	2020 552 96618	1nF 10% 50V 0402
2614	2020 552 96623	2.2nF 10% 50V 0402
2616	4822 124 12415	220µF 20% 400V
2617	4822 124 12415	220µF 20% 400V
2640	3198 035 04710	470pF 50V 0402
2642	2020 552 96618	1nF 10% 50V 0402
2651	2020 552 96628	10nF 10% 16V 0402
2653	3198 035 06810	680pF 5% 50V 0402
2654	4822 124 80151	47µF 16V
2655	2022 552 05679	1µF 10% 16V 0805
2656	2222 580 15649	100nF 10% 50V 0805
2660	4822 126 13881	470pF 5% 50V
2661	2020 552 96618	1nF 10% 50V 0402
2662	4822 124 80061	1000µF 20% 25V
2663	4822 121 51319	1µF 10% 63V
2664	4822 124 40255	100µF 20% 63V
2665	4822 126 13881	470pF 5% 50V
2666	2020 552 96793	4.7nF 10% 50V 0402
2670	2238 586 59812	100nF 20% 50V 0603
2671	2238 586 59812	100nF 20% 50V 0603
2672	2222 580 15649	100nF 10% 50V 0805
2673	2020 558 90621	10nF 630V
2674	2020 558 90621	10nF 630V
2675	2020 558 90621	10nF 630V
2676	2020 558 90621	10nF 630V
2677	2020 552 96623	2.2nF 10% 50V 0402
2690	2020 552 96618	1nF 10% 50V 0402

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3001	4822 051 30471	47Ω 5% 0.062W
3002	4822 051 30471	47Ω 5% 0.062W
3003	4822 117 11297	100kΩ 5% 0.1W
3004	3198 031 01530	15kΩ 5% 0.01W 0402
3005	3198 031 02730	27kΩ 5% 0402
3006	4822 117 13606	10kΩ 5% 0.01W 0402
3007	3198 031 04720	4.7kΩ 5% 0402
3008	4822 051 30102	1kΩ 5% 0.062W
3009	4822 051 30102	1kΩ 5% 0.062W
3010	3198 031 01530	15kΩ 5% 0.01W 0402
3011	4822 051 30561	560Ω 5% 0.062W
3012	3198 031 04720	4.7kΩ 5% 0402
3013	4822 117 13606	10kΩ 5% 0.01W 0402
3014	4822 050 23309	33Ω 1% 0,6W
3015	4822 050 21009	10Ω 1% 0.6W
3016	4822 051 10102	1kΩ 2% 0.25W
3017	4822 050 23309	33Ω 1% 0,6W
3018	4822 050 21009	10Ω 1% 0.6W
3019	4822 051 10102	1kΩ 2% 0.25W
3020	3198 031 05630	56kΩ 5% 0402
3022	4822 051 30681	680Ω 5% 0.062W
3023	3198 031 04730	47Ω 5% 0402
3025	2322 706 71802	1.8kΩ 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3028	2322 704 67502	7.5kΩ 1% 0.5W
3029	4822 051 30123	12kΩ 5% 0.1W
3030	3198 031 01830	18kΩ 5% 0.01W 0402
3031	2322 706 71003	10kΩ 5% 0402
3032	2322 706 71003	10kΩ 5% 0402
3033	2322 705 70184	180Ω 5% 0402
3034	4822 117 13596	220Ω 5% 0.01W 0402
3036	2122 612 00068	NTC 1Ω 20% 6W
3037	4822 117 13606	10kΩ 5% 0.01W 0402
3038	4822 117 11297	100kΩ 5% 0.1W

3039	4822 051 30105	1MΩ 5% 0.062W
3040	4822 117 10837	100kΩ 1% 0.1W
3041	4822 117 13603	33kΩ 5% 0402
3042	4822 051 30471	47Ω 5% 0.062W
3043	3198 031 04720	4.7kΩ 5% 0402
3044	4822 051 30102	1kΩ 5% 0.062W
3045	4822 051 30102	1kΩ 5% 0.062W
3047	3198 031 01540	150kΩ 5% 0402
3048	3198 031 04720	4.7kΩ 5% 0402
3049	3198 031 01230	12kΩ 5% 0402
3050▲	4822 052 10398	3.9Ω 5% 0,33W
3051	4822 051 20822	8.2kΩ 5% 0.1W
3053▲	2322 662 93131	PTC 10Ω
3054	4822 117 13543	470Ω 5% 0402
3055	4822 117 10833	10kΩ 1% 0.1W
3056	4822 051 30331	330Ω 5% 0.062W
3057	4822 051 30101	100Ω 5% 0.062W
3058	4822 051 20105	1MΩ 5% 0.1W
3059	3198 031 05630	56kΩ 5% 0402
3060	4822 050 22204	220kΩ 1% 0.6W
3061	3198 031 01830	18kΩ 5% 0.01W 0402
3062	4822 117 13548	1kΩ 5% 0402
3063	4822 117 13548	1kΩ 5% 0402
3064	4822 117 13606	10kΩ 5% 0.01W 0402
3065	4822 117 13548	1kΩ 5% 0402
3066	4822 117 13606	10kΩ 5% 0.01W 0402
3067	3198 031 01530	15kΩ 5% 0.01W 0402
3068	4822 117 13606	10kΩ 5% 0.01W 0402
3069	4822 051 30471	47Ω 5% 0.062W
3070	4822 051 30103	10kΩ 5% 0.062W
3071	3198 031 04730	47Ω 5% 0402
3073	3198 031 01050	1MΩ 5% 0402
3074	3198 031 01530	15kΩ 5% 0.01W 0402
3075	4822 051 20105	1MΩ 5% 0.1W
3076	4822 117 11297	100kΩ 5% 0.1W
3077	4822 051 20105	1MΩ 5% 0.1W
3078	4822 117 11297	100kΩ 5% 0.1W
3079	4822 051 30681	680Ω 5% 0.062W
3080	4822 051 30681	680Ω 5% 0.062W
3081	3198 031 01520	1.2kΩ 5% 0.01W 0402
3082	3198 031 01520	1.2kΩ 5% 0.01W 0402
3083	2312 915 11002	1kΩ 1% 0.5W
3084	4822 117 13606	10kΩ 5% 0.01W 0402
3085	3198 031 04730	47Ω 5% 0402
3086	3198 031 04730	47Ω 5% 0402
3087	3198 031 04730	47Ω 5% 0402
3088	3198 031 04730	47Ω 5% 0402
3089	4822 117 13606	10kΩ 5% 0.01W 0402
3090	4822 117 13545	100Ω 1% 0402
3091	4822 051 30102	1kΩ 5% 0.062W
3092	4822 051 10102	1kΩ 2% 0.25W
3093	4822 117 13548	1kΩ 5% 0402
3094	4822 051 10102	1kΩ 2% 0.25W
3095	4822 117 13543	470Ω 5% 0402
3096	3198 031 05620	5.6kΩ 5% 0.01W 0402
3097	3198 031 08210	820Ω 5% 0.5W
3098	4822 117 13548	1kΩ 5% 0402
3100	2322 706 71002	1kΩ 1% 0402
3101	2322 706 71002	1kΩ 1% 0402
3102	2322 706 71002	1kΩ 1% 0402
3103	2322 706 71002	1kΩ 1% 0402
3104	2322 706 71002	1kΩ 1% 0402
3106	4822 117 12955	2.7kΩ 1% 0.1W 0805
3107	4822 117 12955	2.7kΩ 1% 0.1W 0805
3108	4822 117 12955	2.7kΩ 1% 0.1W 0805
3109	4822 117 12955	2.7kΩ 1% 0.1W 0805
3110	4822 117 13548	1kΩ 5% 0402
3112	4822 051 30102	1kΩ 5% 0.062W
3114	2322 705 70564	560kΩ 5% 0402
3115	3198 031 02240	220kΩ 5% 0.1W 0402
3116	4822 117 13548	1kΩ 5% 0402
3117	4822 117 13606	10kΩ 5% 0.01W 0402
3118	2122 118 06084	0.051Ω 5% 1W 2512
3120	3198 021 31820	1.8kΩ 5% 0.062W 0603
3121	3198 031 04730	47Ω 5% 0402
3123	4822 117 10965	18kΩ 1% 0.1W
3124	2322 704 67502	7.5kΩ 1% 0.5W
3125	2322 704 67502	7.5kΩ 1% 0.5W
3126	2322 706 72202	2.2kΩ 5% 0402
3128	4822 117 13603	33kΩ 5% 0402
3130	4822 051 30123	12kΩ 5% 0.1W
3131	2322 706 71003	10kΩ 5% 0402
3132	4822 117 13596	220Ω 5% 0.01W 0402
3133	4822 051 30101	100Ω 5% 0.062W
3134	4822 051 30681	680Ω 5% 0.062W
3135	3198 031 04730	47Ω 5% 0402
3136	3198 031 04730	47Ω 5% 0402
3143	4822 053 12472	4.7kΩ 5% 3W
3147	2322 706 71003	10kΩ 5% 0402
3149▲	4822 052 10478	4.7Ω 5% 0.33W
3150	3198 031 01050	1MΩ 5% 0402
3200	3198 021 52240	220kΩ 5% 0805
3202	4822 051 30479	47Ω 5% 0.062W
3203	4822 051 30101	100Ω 5% 0.062W
3204	4822 117 11297	100kΩ 5% 0.1W
3205	4822 117 11297	100kΩ 5% 0.1W
3206	4822 117 12955	2.7kΩ 1% 0.1W 0805
3207	4822 117 12955	2.7kΩ 1% 0.1W 0805
3208	4822 117 12955	2.7kΩ 1% 0.1W 0805
3209	4822 117 12955	2.7kΩ 1% 0.1W 0805
3210	2322 706 71002	1kΩ 1% 0402
3212	4822 051 30102	1kΩ 5% 0.062W
3213	4822 117 13603	33kΩ 5% 0402
3214	2322 705 70124	120kΩ 5% 0402
3215	2322 705 70274	270kΩ 5% 0402
3216	4822 117 13548	1kΩ 5% 0402
3217	4822 117 13606	10kΩ 5% 0.01W 0402
3218	2122 118 06084	0.051Ω 5% 1W 2512
3219	4822 117 13606	10kΩ 5% 0.01W 0402
3220	4822 050 23309	33Ω 1% 0,6W
3224	2322 706 71203	12kΩ 5% 0402
3225	2322 706 71003	10kΩ 5% 0402
3226	4822 117 13606	10kΩ 5% 0.01W 0402
3228	4822 051 30151	150Ω 5% 0.062W
3262	2322 706 71003	10kΩ 5% 0402
3263	2322 706 71003	10kΩ 5% 0402
3265	4822 117 13548	1kΩ 5% 0402
3268	4822 117 13548	1kΩ 5% 0402
3269	3198 031 02720	2.7kΩ 5% 0.01W 0402
3292	4822 051 30561	560Ω 5% 0.062W
3300	2322 706 72204	220kΩ 5% 0402
3301	2322 706 72204	220kΩ 5% 0402
3304	4822 051 30102	1kΩ 5% 0.062W
3306	2322 706 71003	10kΩ 5% 0402
3307	5322 117 13028	12kΩ 1% 0.063W 0603
3308	4822 051 30102	1kΩ 5% 0.062W
3311	4822 117 13579	220kΩ 1% 0.1W 0805
3312	4822 051 30102	1kΩ 5% 0.062W
3313	2322 704 67502	7.5kΩ 1% 0.5W
3317	2322 704 67502	7.5kΩ 1% 0.5W
3320	2322 706 71003	10kΩ 5% 0402
3321	4822 051 30102	1kΩ 5% 0.062W
3322	2322 706 73902	3.9kΩ 1% 0402
3323	2322 706 71003	10kΩ 5% 0402
3324	4822 051 30102	1kΩ 5% 0.062W
3325	4822 051 30471	47Ω 5% 0.062W
3326	3198 031 04720	4.7kΩ 5% 0402
3327	4822 117 13606	10kΩ 5% 0.01W 0402
3328	4822 051 30103	10kΩ 5% 0.062W
3332	2322 706 76803	68kΩ 5% 0402
3333	4822 051 30102	1kΩ 5% 0.062W
3334	2322 706 71003	10kΩ 5% 0402
3335	2322 706 71503	15kΩ 5% 1W 0402
3340	4822 051 30102	1kΩ 5% 0.062W
3341	4822 117 13606	10kΩ 5% 0.01W 0402
3342	4822 051 30103	10kΩ 5% 0.062W
3343	4822 051 30102	1kΩ 5% 0.062W
3344	4822 051 30102	1kΩ 5% 0.062W
3345	4822 117 13548	1kΩ 5% 0402
3346	4822 117 13548	1kΩ 5% 0402
3347	4822 051 30331	330Ω 5% 0.062W
3348	4822 051 30331	330Ω 5% 0.062W
3349	4822 051 30102	1kΩ 5% 0.062W
3350	4822 051 30472	4.7Ω 5% 0.062W
3351	4822 051 30103	10kΩ 5% 0.062W
3352	4822 051 30103	10kΩ 5% 0.062W
3353	4822 117 13606	10kΩ 5% 0.01W 0402
3354	3198 031 04720	4.7kΩ 5% 0402
3358	4822 051 30222	2.2kΩ 5% 0.062W
3359	3198 031 05620	5.6kΩ 5% 0.01W 0402
3360	3198 031 01220	1.2kΩ 5% 0.01W 0402
3361	3198 031 04720	4.7kΩ 5% 0402
3362	3198 031 02720	2.7kΩ 5% 0.01W 0402
3363	4822 051 30102	1kΩ 5% 0.062W
3364	4822 051 30102	1kΩ 5% 0.062W
3366	4822 117 13606	10kΩ 5% 0.01W 0402
3367	4822 051 30103	10kΩ 5% 0.062W
3369	3198 031 04720	4.7kΩ 5% 0402
3370	2322 675 20907	PTC 470Ω 50% 25V 0805
3373	3198 031 04720	4.7kΩ 5% 0402
3374	3198 031 04730	47Ω 5% 0402
3376	3198 031 04730	47Ω 5% 0402
3377	3198 031 04720	4.7kΩ 5% 0402
3378	4822 117 13606	10kΩ 5% 0.01W 0402
3380	3198 031 04730	47Ω 5% 0402
3381	3198 031 04730	47Ω 5% 0402
3383	4822 117 13606	10kΩ 5% 0.01W 0402
3384	4822 117 13606	10kΩ 5% 0.01W 0402
3388	4822 051 30102	1kΩ 5% 0.062W
3389	4822 051 30102	1kΩ 5% 0.062W
3391	4822 117 13606	10kΩ 5% 0.01W 0402
3400▲	2122 550 00158	VDR 1mA 612V
3401▲	4822 117 10118	1MΩ 5% 0.5W
3404	4822 116 83872	220Ω 5% 0.5W
3450▲	2322 662 93131	PTC 10Ω
3451▲	2322 662 93131	PTC 10Ω
3452▲	2122 612 00068	NTC 1Ω 20% 6W
3460	4822 117 13602	2.2kΩ 5% 0.01W 0402
3461	4822 117 13606	10kΩ 5% 0.01W 0402
3463	4822 117 13606	10kΩ 5% 0.01W 0402
3465	4822 117 13606	10kΩ 5% 0.01W 0402
3467	4822 117 13606	10kΩ 5% 0.01W 0402
3469	3198 031 04720	4.7kΩ 5% 0402
3470	4822 117 13606	10kΩ 5% 0.01W 0402
3471▲	4822 117 13548	1kΩ 5% 0402
3472▲	4822 117 13548	1kΩ 5% 0402
3501	4822 051 30102	1kΩ 5% 0.062W
3502	4822 051 30471	47Ω 5% 0.062W
3503	2322 706 74702	4.7kΩ 5% 0402
3504	2322 706 73303	33kΩ 5% 0402
3505	2322 706 74702	4.7kΩ 5% 0402
3506▲	2322 662 93131	PTC 10Ω
3509	2312 915 11209	12Ω 1% 0.5W
3603	4822 051 20474	470kΩ 5% 0.1W
3604	4822 051 20474	470kΩ 5% 0.1W
3605	4822 051 20474	470kΩ 5% 0.1W
3606	4822 051 30101	100Ω 5% 0.062W
3607	4822 117 12891	220kΩ 1%
3608	2312 915 11209	12Ω 1% 0.5W
3609	4822 051 20474	470kΩ 5% 0.1W
3610	4822 050 23308	3.3Ω 1% 0.6W
3611	4822 050 21003	10kΩ 1% 0.6W
3613	4822 117 13606	10kΩ 5% 0.01W 0402
3614	2322 194 95001	0.27Ω 5% 2W
3615	2322 194 95001	0.27Ω 5% 2W
3616	3198 031 01230	12kΩ 5% 0402
3617	3198 031 04730	47Ω 5% 0402
3618	4822 117 13603	33kΩ 5% 0402
3619	3198 031 03320	3.3kΩ 5% 0402
3620	2322 194 95001	0.27Ω 5% 2W
3621	4822 050 22208	2.2Ω 1% 0,6W
3622	4822 050 22208	2.2Ω 1% 0,6W
3623	4822 117 13548	1kΩ 5% 0402
3639	4822 051 10102	1kΩ 2% 0.25W
3640	4822 051 30331	330Ω 5% 0.062W
3641	4822 051 20471	470Ω 5% 0.1W
3642	4822 117 11503	220Ω 1% 0.1W
3643	4822 117 11503	220Ω 1% 0.1W
3651	4822 117 13601	22kΩ 5% 0402
3652	3198 031 01050	1MΩ 5% 0402
3654	4822 117 13606	10kΩ 5% 0.01W 0402
3655	4822 117 13548	1kΩ 5% 0402
3656	3198 031 01820	1.8kΩ 5% 0.01W 0402
3659	4822 117 11503	220Ω 1% 0.1W
3660	4822 117 11504	270Ω 1% 0.1W
3661	4822 117 11504	270Ω 1% 0.1W
3663▲	4822 052 10108	1Ω 5% 0.33W
3664	2322 706 71204	120kΩ 5% 0402
3665	2322 705 70274	270kΩ 5% 0402
3666	4822 051 30101	100Ω 5% 0.062W
3668▲	4822 052 11102	1kΩ 5% 0.5W
3669	2322 706 71204	120kΩ 5% 0402
3671	2322 706 71003	10kΩ 5% 0402
3673▲	4822 052 11102	1kΩ 5% 0.5W
3675	2322 702 60158	1.5Ω
3676	2322 706 74702	4.7kΩ 5% 0402
3677	2322 706 74703	47kΩ 1% 0402
3678	3198 031 04730	47Ω 5% 0402
3680	4822 117 13579	220kΩ 1% 0.1W 0805
3681	4822 117 13579	220kΩ 1% 0.1W 0805
3682	4822 117 13579	220kΩ 1% 0.1W 0805
3683	4822 051 20334	330kΩ 5% 0.1W
3684	4822 051 20334	330kΩ 5% 0.1W
3685	4822 051 20334	330kΩ 5% 0.1W
3690	3198 031 03920	3.9kΩ 5% 0402
3691	3198 031 08220	8.2kΩ 5% 0.5W
3692	4822 117 13606	10kΩ 5% 0.01W 0402
3693	4822 117 13602	2.2kΩ 5% 0.01W 0402
3806	4822 117 13543	470Ω 5% 0402
3807	4822 117 13606	10kΩ 5% 0.01W 0402
3808	4822 117 13606	10kΩ 5% 0.01W 0402
3809	3198 031 02730	27kΩ 5% 0402
3811	4822 117 13545	100Ω 1% 0402
3999	4822 117 13548	1kΩ 5% 0402
9001	4822 051 20008	Jumper 0805
9003	4822 051 20008	Jumper 0805
9004	4822 117 13605	Jumper 0402
9020	4822 051 20008	Jumper 0805
9021	4822 051 20008	Jumper 0805
9022	4822 051 20008	Jumper 0805
9028	4822 117 13605	Jumper 0402

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5001	2422 531 02444	Transf. S13932-04Y
5002▲	3104 308 21022	Transf. BS42315-02
5004▲	3104 308 21022	Transf. BS42315-02
5005▲	3122 138 38901	Mains filter CU28D3
5121	3104 308 20771	Bridge coil BD21232-00
5220	3104 308 20911	Transf. BS29238-00
5225	2422 536 00672	4.7μH 20%

5229	2422 536 00826	220µH 10%
5290	3104 308 21171	transf. BD15403-00
5291	4822 157 11737	22µH 10%
5292	4822 157 11737	22µH 10%
5293	4822 157 11737	22µH 10%
5401⚠	3122 138 38901	Mains filter CU28D3
5402⚠	3122 138 38901	Mains filter CU28D3
5500⚠	2422 531 00075	Transf. BS16421-00
5503	4822 157 11737	22µH 10%
5600	3104 308 20821	Coil BS42228-00 B
5601	4822 157 11411	Bead 80Ω at 100MHz
5612	4822 157 11411	Bead 80Ω at 100MHz
5660	4822 157 51192	220µH 10%

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6002	4822 130 11397	BAS316
6003	9340 548 71115	PDZ33B
6004	4822 130 11397	BAS316
6005	4822 130 11397	BAS316
6006	4822 130 11397	BAS316
6007	4822 130 11397	BAS316
6008	4822 130 11397	BAS316
6009	4822 130 11397	BAS316
6010	4822 130 11397	BAS316
6011	4822 130 11397	BAS316
6012	3198 020 55680	BZX384-C5V6
6018	4822 130 11397	BAS316
6019	4822 130 11397	BAS316
6021	4822 130 32961	BYV28-200
6023	4822 130 11397	BAS316
6027	4822 130 11397	BAS316
6028	4822 130 11397	BAS316
6029	4822 130 11416	PDZ6.8B
6031	3198 020 55680	BZX384-C5V6
6032	3198 020 55680	BZX384-C5V6
6033	9322 150 18685	BZX384-C47
6034	4822 130 11397	BAS316
6035	4822 130 11397	BAS316
6042	9322 150 18685	BZX384-C47
6044	9322 202 88687	STTH2003CFP
6045	4822 130 32961	BYV28-200
6050	4822 130 11152	UDZ18B
6054	9340 553 52115	BAS321
6055	9340 553 52115	BAS321
6061	4822 130 11152	UDZ18B
6062	4822 130 11152	UDZ18B
6075	9340 292 80135	BZG03-C270
6077	9340 292 80135	BZG03-C270
6086	4822 130 11397	BAS316
6111	4822 130 11397	BAS316
6112	4822 130 11397	BAS316
6113	4822 130 11397	BAS316
6114	4822 130 11416	PDZ6.8B
6117	4822 130 11152	UDZ18B
6120	9322 202 75687	BYW29FP-200
6123	4822 130 11397	BAS316
6133	4822 130 11397	BAS316
6142	9322 192 15668	SM S3J
6201	3198 020 55680	BZX384-C5V6
6202	4822 130 11397	BAS316
6204	3198 020 55680	BZX384-C5V6
6205	4822 130 11152	UDZ18B
6206	4822 130 11397	BAS316
6211	9322 202 55685	BYG22D
6213	4822 130 11397	BAS316
6216	4822 130 11152	UDZ18B
6225	9322 173 47687	STPS20L40CFP
6230	9322 155 79685	EC31QS04
6267	4822 130 82627	SB540
6268	9322 128 70685	SMSS14
6269	9322 099 61685	BYG10J
6270	9322 099 61685	BYG10J
6291	4822 130 11572	STPS8H100F
6292	4822 130 11572	STPS8H100F
6312	4822 130 80622	BAT54
6313	4822 130 80622	BAT54
6321	4822 130 80622	BAT54
6322	4822 130 80622	BAT54
6325	4822 130 11416	PDZ6.8B
6333	4822 130 80622	BAT54
6334	4822 130 80622	BAT54
6335	4822 130 11397	BAS316
6340	4822 130 80622	BAT54
6341	4822 130 80622	BAT54
6347	4822 130 80622	BAT54
6362	4822 130 11397	BAS316
6364	4822 130 11397	BAS316
6365	4822 130 11397	BAS316
6366	4822 130 11397	BAS316
6375	4822 130 11397	BAS316
6376	4822 130 11397	BAS316
6378	4822 130 80622	BAT54
6460	4822 130 11397	BAS316
6461	4822 130 11397	BAS316
6470	4822 130 11397	BAS316
6471	4822 130 11397	BAS316
6501	9322 218 64673	BZT03C200
6502	9322 218 64673	BZT03C200
6503	9322 176 76668	RS1J
6504	9322 176 76668	RS1J
6505	9322 155 79685	EC31QS04
6506	9322 218 64673	BZT03C200
6510	9322 099 61685	BYG10J
6511	9322 099 61685	BYG10J
6512	9322 099 61685	BYG10J
6513	9322 099 61685	BYG10J
6600	9322 177 84667	GBU8JL-7014
6601	9322 150 17685	BZX384-C39
6602	4822 130 11522	UDZ15B
6605	9322 192 15668	SM S3J
6606	9322 192 15668	SM S3J
6608	9322 128 70685	SMSS14
6609	9322 208 81685	BZG05C18
6611	3139 120 52021	BYV29X-500
6640	9322 128 70685	SMSS14
6641	4822 130 11397	BAS316
6642	9322 128 70685	SMSS14
6643	4822 130 11152	UDZ18B
6651	4822 130 80622	BAT54
6652	9322 128 70685	SMSS14
6653	4822 130 10837	UDZS8.2B
6654	4822 130 11397	BAS316
6660	9322 202 55685	BYG22D
6661	9322 202 55685	BYG22D
6663	9322 198 81685	SL04
6665	9322 198 81685	SL04
6666	4822 130 10837	UDZS8.2B

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7001	9322 108 21682	MC34067P
7002⚠	9322 149 04682	TCET1102
7003⚠	9322 149 04682	TCET1102
7004	9322 192 17685	P0102BL
7005	9322 192 18687	STP15NK50ZFP
7006	9322 192 18687	STP15NK50ZFP
7007	4822 130 41246	BC327-25
7008	4822 130 41246	BC327-25
7009	3198 010 42310	BC847BW
7010	9322 192 16685	TS2431AI
7011	9322 192 16685	TS2431AI
7012	3198 010 42310	BC847BW
7013	5322 130 63033	BCP56
7017	3198 010 42320	BC857BW
7018	3198 010 42310	BC847BW
7020	9335 671 30126	BC517
7021	9335 671 30126	BC517
7042	9340 308 50135	PMST5401
7050	9340 557 16127	PSMN035-150P
7052	9340 557 58118	PSMN063-150D
7058	3198 010 42310	BC847BW
7059	9340 308 60135	PMST5550
7090	3198 010 42320	BC857BW
7091	3198 010 42320	BC857BW
7092	3198 010 44350	BC807-25W
7093	4822 209 80591	LM317T
7110	9340 308 50135	PMST5401
7112	9352 673 56112	TEA1507P/N1
7117	9340 557 17118	PSMN035-150B
7120⚠	9322 149 04682	TCET1102
7121	9322 192 16685	TS2431AI
7130	9322 192 16685	TS2431AI
7134	3198 010 42310	BC847BW
7200	9340 565 06215	BSH114
7202	9965 000 04199	BSN20
7212	9352 673 56112	TEA1507P/N1
7217	9340 557 18127	PSMN070-200P
7220⚠	9322 149 04682	TCET1102
7227	9322 192 16685	TS2431AI
7230	9322 205 64687	L4940P85
7260	9322 166 31682	L4973V3.3
7304	9322 192 16685	TS2431AI
7308	9322 213 35668	LM339P
7326	3198 010 42310	BC847BW
7327	3198 010 42310	BC847BW
7330	9322 213 35668	LM339P
7341	3198 010 42320	BC857BW
7348	3198 010 42310	BC847BW
7351	3198 010 42310	BC847BW
7352	3198 010 42310	BC847BW
7362	3198 010 42310	BC847BW
7366	9322 213 19668	LM324APW
7375	3198 010 42310	BC847BW
7376	3198 010 42310	BC847BW
7391	3198 010 42320	BC857BW
7460	9340 219 30115	BC817-25W
7461	4822 130 60142	BC869
7465	3198 010 42320	BC857BW
7470	9340 219 30115	BC817-25W
7500	9322 037 99682	TNY256P
7501⚠	9322 149 04682	TCET1102
7502	9322 192 16685	TS2431AI
7540	4822 209 17398	LD1117DT33
7601	3198 010 42310	BC847BW
7602	3198 010 42320	BC857BW
7608	5322 130 44593	BC369
7610	9322 223 21687	STW29NK50Z
7640	9965 000 04199	BSN20
7641	9340 219 30115	BC817-25W
7650	9322 130 69682	MC33368P
7654	3198 010 42320	BC857BW
7655	3198 010 42310	BC847BW
7656	3198 010 42310	BC847BW
7661	5322 209 90529	MC34063AD

Ambi Light [AL]

Various

0615	3104 317 09401	SW (see Prod. Survey)
1010	2422 086 00657	Fuse 3A 125V F SMD
1050	2422 543 01431	Xtal 20MHz 16pF
1M08	2422 025 09406	Connector 4p m
1M10	2422 025 09406	Connector 4p m
1M11	2422 025 19068	Connector 11p m
1M12	2422 025 19069	Connector 3p m
1M48	2422 025 10768	Connector 3p m
1M49	2422 025 18884	Connector 4p m

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2001	2020 012 00018	1000µF 20% 16V
2002	2238 586 59812	100nF 20% 50V 0603
2003	2020 552 96618	1nF 10% 50V 0402
2004	2020 552 96618	1nF 10% 50V 0402
2005	3198 034 01590	15pF 1% 50V 0402
2006	3198 034 01590	15pF 1% 50V 0402

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3003	4822 117 13596	220Ω 5% 0.01W 0402
3004	4822 051 20471	470Ω 5% 0.1W
3005	4822 051 20561	560Ω 5% 0.1W
3006	2322 762 60102	1kΩ 5% 2512
3007	2322 762 60102	1kΩ 5% 2512
3008	4822 051 20471	470Ω 5% 0.1W
3009	4822 051 20561	560Ω 5% 0.1W
3010	2322 762 60102	1kΩ 5% 2512
3011	2322 762 60102	1kΩ 5% 2512
3012	4822 051 20471	470Ω 5% 0.1W
3013	4822 051 20561	560Ω 5% 0.1W
3014	2322 762 60102	1kΩ 5% 2512
3015	2322 762 60102	1kΩ 5% 2512
3016	3198 031 04720	4.7kΩ 5% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	3198 031 04720	4.7kΩ 5% 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	3198 031 04720	4.7kΩ 5% 0402
3022	4822 117 13545	100Ω 1% 0402
3023	4822 117 13545	100Ω 1% 0402
3024	3198 031 04720	4.7kΩ 5% 0402
3025	3198 031 04720	4.7kΩ 5% 0402
3028	4822 117 13606	10kΩ 5% 0.01W 0402
3029	3198 031 04720	4.7kΩ 5% 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	3198 031 04720	4.7kΩ 5% 0402
3042	4822 053 20105	1MΩ 5% 0.25W
3999	4822 051 30103	10kΩ 5% 0.062W

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5002	2422 536 00923	22µH 10% LHL10
5007	2422 536 00923	22µH 10% LHL10
5008	2422 536 00923	22µH 10% LHL10
5014	3104 308 21271	Transf. BD21416-00
5015	3104 308 21271	Transf. BD21416-00
5016	3104 308 21271	Transf. BD21416-00

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6000	4822 130 11397	BAS316
6001	4822 130 11397	BAS316
6002	4822 130 11397	BAS316
6003	4822 130 11397	BAS316
6004	4822 130 11397	BAS316

6005	4822 130 11397	BAS316
6006	4822 130 11152	UDZ18B
6007	4822 130 11152	UDZ18B
6008	4822 130 11152	UDZ18B
6009	4822 130 11152	UDZ18B
6010	4822 130 11152	UDZ18B
6011	4822 130 11152	UDZ18B

7001		For SW see item 0615
7002	9322 202 58668	LD1117DT50
7009	3198 010 42310	BC847BW
7010	3198 010 42310	BC847BW
7011	3198 010 42310	BC847BW
7015	9322 214 20668	SI4946EY
7016	9322 214 20668	SI4946EY
7017	9322 214 20668	SI4946EY
7018	3198 010 42310	BC847BW
7019	3198 010 42310	BC847BW
7020	3198 010 42310	BC847BW

Small Signal Board [B]

Various

0601	3104 317 09931	SW 42” (See Prod. Surv.)
0601	3104 317 07411	SW 50” (See Prod. Surv.)
0602	3104 317 09831	SW 42” (See Prod. Surv.)
0602	3104 317 09821	SW 50” (See Prod. Surv.)
0603	3104 317 06601	SW 42” (See Prod. Surv.)
0603	3104 317 06591	SW 50” (See Prod. Surv.)
0605	3104 317 47621	SW All (See Prod. Surv.)
1000	2422 086 11092	Fuse 500mA 50V F SMD
1001	2422 543 01497	Xtal 6Mhz 20pF
1003	2422 025 14911	Socket Euro 21p f
1003	2422 025 18256	Socket 21p f Bk
1062⚠	2422 549 00151	Socket 3p m
1305	2422 543 01488	Xtal 4.433619Mhz 20pF
1308	2422 543 01486	Xtal 3.579545Mhz 16pF
1404	2422 127 00543	Switch 1p 2pos
1407	2422 549 00458	Filter 5M5/5M74
1408	2422 549 44372	SAW 38.9MHz K3953L
1409	2422 549 44369	SAW 38.9MHz K9656L
1703	2422 540 00002	Resonator CSTCE*G52
1A01	2422 543 01059	Resonator 18MHz 12p
1D01	2422 033 00515	Socket DVI-I 29p f
1E02	2422 025 17274	Connector 10p m
1E04	2422 025 18738	Connector 3p m
1G50	2422 025 18427	Connector 31p f
1I01	2422 025 18133	Socket SCART
1I04	2422 025 18133	Socket SCART
1I05	2422 026 05539	Socket Cinch 2p f WhRd
1I06	2422 026 05527	Socket Cinch 2p f
1I07	2422 026 05054	Soc CINCH 2p f WhRd
1I53	2422 549 45325	Bead 67Ω at 100MHz
1I56	2422 549 45325	Bead 67Ω at 100MHz
1I57	2422 549 45325	Bead 67Ω at 100MHz
1I59	2422 549 45325	Bead 67Ω at 100MHz
1M01	2422 025 10768	Connector 3p m
1M03	2422 025 10771	Connector 10p m
1M07	4822 267 10637	Connector 5p
1M15	4822 267 10748	Connector 3p
1M20	2422 025 10772	Connector 12p m
1M36	2422 025 10655	Connector 11p m
1M37	2422 025 10655	Connector 11p m
1M51⚠	2422 025 18884	Connector 4p m
1M52	2422 025 10769	Connector 9p m
1T01	3139 147 22161	Tuner UV1318S/A I H N-3
1U01⚠	2422 086 11112	Fuse 1A T 125V
8220	3104 311 07291	Cable 12P/820/12P
8220	3104 311 08631	Cable12P/480/12P
8303	3104 311 06511	Cable 10p/280/10p
8303	3104 311 06701	Cable 10P/480/10P
8307	3104 311 05691	Cable 5p/100/5p
8321	3104 311 08731	Cable POSI/100/POSI
8336⚠	3104 311 03891	Cable 11P/340/11P
8336⚠	3104 311 06991	Cable 11P/280/11P
8337	3104 311 08621	Cable 11P/220/11P
8346	3104 311 07401	Cable 11P/180/11P
8346	3104 311 08031	Cable 11P/480/11P
8349	3104 311 10631	Cable 4p/1000/4p
8352⚠	3104 311 07941	Cable 9P/820/9P
8352	3104 311 10161	Cable 9p/1000/9p

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2002	3198 034 02790	47pF 1% 50V 0402
2003	2238 780 15654	220nF 10% 16V 0805
2004	2238 780 15654	220nF 10% 16V 0805
2005	2238 586 59812	100nF 20% 50V 0603
2006	2238 586 59812	100nF 20% 50V 0603
2007	2238 586 59812	100nF 20% 50V 0603
2008	2238 586 59812	100nF 20% 50V 0603
2013	2020 021 91557	100µF 20% 16V
2016	4822 124 12095	100µF 20% 16V
2017	2238 586 59812	100nF 20% 50V 0603
2018	4822 126 14324	33pF 5% 50V 0402
2019	2238 586 59812	100nF 20% 50V 0603
2020	3198 035 02210	220pF 5% 50V 0402
2022	2238 586 59812	100nF 20% 50V 0603
2023	2238 586 59812	100nF 20% 50V 0603
2024	2238 586 59812	100nF 20% 50V 0603
2025	2238 586 59812	100nF 20% 50V 0603
2026	2238 586 59812	100nF 20% 50V 0603
2027	2238 586 59812	100nF 20% 50V 0603
2028	2238 586 59812	100nF 20% 50V 0603
2029	2238 586 59812	100nF 20% 50V 0603
2031	2238 586 59812	100nF 20% 50V 0603
2033	2238 869 15829	82pF 5% 50V 0402
2034	2238 869 15829	82pF 5% 50V 0402
2035	2238 869 15829	82pF 5% 50V 0402
2036	2238 869 15829	82pF 5% 50V 0402
2037	2238 869 15829	82pF 5% 50V 0402
2038	2238 586 59812	100nF 20% 50V 0603
2039	2238 586 59812	100nF 20% 50V 0603
2040	2238 586 59812	100nF 20% 50V 0603
2067	2238 586 59812	100nF 20% 50V 0603
2072	2238 586 59812	100nF 20% 50V 0603
2073	3198 017 44740	470nF 10V 0603
2074	2238 586 59812	100nF 20% 50V 0603
2075	2238 586 59812	100nF 20% 50V 0603
2305	2238 586 59812	100nF 20% 50V 0603
2316	2238 586 59812	100nF 20% 50V 0603
2322	2238 586 59812	100nF 20% 50V 0603
2350	2238 586 59812	100nF 20% 50V 0603
2351	2238 586 59812	100nF 20% 50V 0603
2352	2238 586 59812	100nF 20% 50V 0603
2356	2238 586 59812	100nF 20% 50V 0603
2357	2238 586 59812	100nF 20% 50V 0603
2358	3198 035 03320	3.3nF 5% 50V 0402
2359	3198 034 01590	15pF 1% 50V 0402
2360	3198 034 01580	1.5pF 1% 50V 0402
2361	3198 034 01280	1.2pF 1% 50V 0402
2362	2238 869 15109	10pF 5% 50V 0402
2365	2238 586 59812	100nF 20% 50V 0603
2366	2238 586 59812	100nF 20% 50V 0603
2367	2238 586 59812	100nF 20% 50V 0603
2368	2238 586 59812	100nF 20% 50V 0603
2369	2238 586 59812	100nF 20% 50V 0603
2370	2238 586 59812	100nF 20% 50V 0603
2371	3198 035 14720	4.7nF 5% 25V 0402
2372	2022 552 05679	1µF 10% 16V 0805
2373	2238 586 59812	100nF 20% 50V 0603
2374	2022 552 05679	1µF 10% 16V 0805
2375	2238 787 15641	22nF 5% 16V 0402
2376	2238 586 59812	100nF 20% 50V 0603
2377	2020 021 91557	100µF 20% 16V
2378	2238 586 59812	100nF 20% 50V 0603
2384	2238 586 59812	100nF 20% 50V 0603
2387	2022 552 05679	1µF 10% 16V 0805
2391	2238 586 59812	100nF 20% 50V 0603
2392	2022 552 05679	1µF 10% 16V 0805
2394	2022 552 05679	1µF 10% 16V 0805
2403	2238 586 59812	100nF 20% 50V 0603
2404	2022 552 05679	1µF 10% 16V 0805
2405	3198 035 14720	4.7nF 5% 25V 0402
2406	4822 117 13605	Jumper 0402
2409	2022 552 05679	1µF 10% 16V 0805
2410	2020 021 91557	100µF 20% 16V
2411	2238 586 59812	100nF 20% 50V 0603
2412	3198 035 14720	4.7nF 5% 25V 0402
2414	2020 021 91557	100µF 20% 16V
2415	2238 586 59812	100nF 20% 50V 0603
2416	2022 552 05679	1µF 10% 16V 0805
2417	4822 126 14583	470nF 10% 16V 0805
2418	3198 034 05680	5.6pF 1% 50V 0402
2425	2020 021 91557	100µF 20% 16V
2430	4822 126 14324	33pF 5% 50V 0402
2432	2238 586 59812	100nF 20% 50V 0603
2433	2238 586 59812	100nF 20% 50V 0603
2434	2238 586 59812	100nF 20% 50V 0603
2435	2020 552 96618	1nF 10% 50V 0402
2436	2022 552 05679	1µF 10% 16V 0805
2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805
2707	3198 034 02790	47pF 1% 50V 0402
2709	2238 586 59812	100nF 20% 50V 0603
2710	2238 586 59812	100nF 20% 50V 0603
2711	2238 586 59812	100nF 20% 50V 0603
2712	2238 586 59812	100nF 20% 50V 0603
2716	2238 586 59812	100nF 20% 50V 0603
2717	2238 586 59812	100nF 20% 50V 0603
2721	2238 869 15101	100pF 5% 50V 0402
2722	2238 869 15101	100pF 5% 50V 0402
2723	2238 586 59812	100nF 20% 50V 0603
2725	2238 586 59812	100nF 20% 50V 0603
2726	2238 586 59812	100nF 20% 50V 0603
2727	2238 586 59812	100nF 20% 50V 0603
2728	2020 021 91854	10µF 20% 16V
2729	2238 586 59812	100nF 20% 50V 0603
2730	2020 021 91557	100µF 20% 16V
2731	2238 586 59812	100nF 20% 50V 0603
2732	2020 552 96618	1nF 10% 50V 0402
2733	2238 586 59812	100nF 20% 50V 0603
2734	2238 586 59812	100nF 20% 50V 0603
2735	2238 586 59812	100nF 20% 50V 0603
2736	2238 586 59812	100nF 20% 50V 0603
2738	2238 586 59812	100nF 20% 50V 0603
2739	2020 021 91557	100µF 20% 16V
2740	2238 787 15641	22nF 5% 16V 0402
2741	2238 787 15641	22nF 5% 16V 0402
2742	2238 787 15641	22nF 5% 16V 0402
2743	2238 586 59812	100nF 20% 50V 0603
2744	2238 586 59812	100nF 20% 50V 0603
2745	2238 586 59812	100nF 20% 50V 0603
2746	2238 586 59812	100nF 20% 50V 0603
2748	2238 586 59812	100nF 20% 50V 0603
2749	2238 586 59812	100nF 20% 50V 0603
2750	2020 552 96618	1nF 10% 50V 0402
2751	2020 552 96618	1nF 10% 50V 0402
2752	2020 552 96618	1nF 10% 50V 0402
2753	2020 552 96618	1nF 10% 50V 0402
2754	2020 552 96618	1nF 10% 50V 0402
2755	2020 552 96618	1nF 10% 50V 0402
2756	2020 552 96618	1nF 10% 50V 0402
2757	2238 787 15641	22nF 5% 16V 0402
2759	2020 552 96618	1nF 10% 50V 0402
2760	2238 787 15641	22nF 5% 16V 0402
2761	2238 787 15641	22nF 5% 16V 0402
2762	2238 787 15641	22nF 5% 16V 0402
2763	2238 787 15641	22nF 5% 16V 0402
2764	2238 787 15641	22nF 5% 16V 0402
2768	2238 787 15641	22nF 5% 16V 0402
2769	2020 552 96618	1nF 10% 50V 0402
2770	2020 552 96618	1nF 10% 50V 0402
2771	2020 552 96618	1nF 10% 50V 0402
2772	2238 787 15641	22nF 5% 16V 0402
2773	2020 552 96618	1nF 10% 50V 0402
2777	2020 552 96618	1nF 10% 50V 0402
2778	2020 552 96618	1nF 10% 50V 0402
2780	2020 552 96618	1nF 10% 50V 0402
2781	2020 552 96618	1nF 10% 50V 0402
2782	2020 552 96618	1nF 10% 50V 0402
2784	2238 787 15641	22nF 5% 16V 0402
2785	2238 787 15641	22nF 5% 16V 0402
2788	2238 586 59812	100nF 20% 50V 0603
2789	2238 586 59812	100nF 20% 50V 0603
2790	2238 586 59812	100nF 20% 50V 0603
2791	2238 586 59812	100nF 20% 50V 0603
2792	2238 586 59812	100nF 20% 50V 0603
2793	2238 586 59812	100nF 20% 50V 0603
2794	2020 552 96618	1nF 10% 50V 0402
2795	2020 552 96618	1nF 10% 50V 0402
2796	2020 552 96618	1nF 10% 50V 0402
2797	2020 552 96618	1nF 10% 50V 0402
2798	2020 552 96618	1nF 10% 50V 0402
2799	2020 552 96618	1nF 10% 50V 0402
2800	2238 586 59812	100nF 20% 50V 0603
2802	2238 586 59812	100nF 20% 50V 0603
2804	2238 586 59812	100nF 20% 50V 0603
2805	2020 552 96618	1nF 10% 50V 0402
2806	2238 586 59812	100nF 20% 50V 0603
2807	2238 586 59812	100nF 20% 50V 0603
2808	2020 552 96618	1nF 10% 50V 0402
2809	2020 552 96618	1nF 10% 50V 0402
2810	2238 586 59812	100nF 20% 50V 0603
2811	2238 586 59812	100nF 20% 50V 0603
2812	3198 031 02290	22Ω 5% 0.1W 0402
2813	2238 586 59812	100nF 20% 50V 0603
2817	2238 586 59812	100nF 20% 50V 0603
2819	2238 586 59812	100nF 20% 50V 0603
2821	2238 787 15641	22nF 5% 16V 0402
2822	2238 787 15641	22nF 5% 16V 0402

2823	2238 586 59812	100nF 20% 50V 0603
2824	2238 586 59812	100nF 20% 50V 0603
2825	2238 586 59812	100nF 20% 50V 0603
2826	2238 586 59812	100nF 20% 50V 0603
2827	2238 586 59812	100nF 20% 50V 0603
2829	2020 021 91557	100µF 20% 16V
2830	2238 586 59812	100nF 20% 50V 0603
2831	2238 586 59812	100nF 20% 50V 0603
2832	2238 586 59812	100nF 20% 50V 0603
2833	2238 586 59812	100nF 20% 50V 0603
2834	2238 586 59812	100nF 20% 50V 0603
2835	2238 586 59812	100nF 20% 50V 0603
2836	2238 586 59812	100nF 20% 50V 0603
2837	2238 869 15101	100pF 5% 50V 0402
2838	2238 869 15101	100pF 5% 50V 0402
2843	2238 586 59812	100nF 20% 50V 0603
2844	2238 586 59812	100nF 20% 50V 0603
2845	2238 586 59812	100nF 20% 50V 0603
2846	2238 586 59812	100nF 20% 50V 0603
2849	2238 586 59812	100nF 20% 50V 0603
2850	2238 586 59812	100nF 20% 50V 0603
2851	2238 586 59812	100nF 20% 50V 0603
2852	2238 586 59812	100nF 20% 50V 0603
2853	2238 586 59812	100nF 20% 50V 0603
2854	2238 586 59812	100nF 20% 50V 0603
2855	2238 586 59812	100nF 20% 50V 0603
2856	2238 586 59812	100nF 20% 50V 0603
2857	2238 586 59812	100nF 20% 50V 0603
2858	2238 586 59812	100nF 20% 50V 0603
2859	2238 586 59812	100nF 20% 50V 0603
2860	2238 586 59812	100nF 20% 50V 0603
2861	2238 586 59812	100nF 20% 50V 0603
2862	2238 586 59812	100nF 20% 50V 0603
2863	2238 586 59812	100nF 20% 50V 0603
2864	2238 586 59812	100nF 20% 50V 0603
2865	2238 586 59812	100nF 20% 50V 0603
2866	2238 586 59812	100nF 20% 50V 0603
2867	2238 586 59812	100nF 20% 50V 0603
2868	2238 586 59812	100nF 20% 50V 0603
2869	2238 586 59812	100nF 20% 50V 0603
2870	2238 586 59812	100nF 20% 50V 0603
2871	2020 021 91557	100µF 20% 16V
2872	2238 586 59812	100nF 20% 50V 0603
2873	2238 586 59812	100nF 20% 50V 0603
2874	2238 586 59812	100nF 20% 50V 0603
2875	2238 586 59812	100nF 20% 50V 0603
2876	2238 586 59812	100nF 20% 50V 0603
2877	2238 586 59812	100nF 20% 50V 0603
2878	2238 586 59812	100nF 20% 50V 0603
2879	2238 586 59812	100nF 20% 50V 0603
2880	2238 586 59812	100nF 20% 50V 0603
2881	3198 034 02790	47pF 1% 50V 0402
2882	2238 586 59812	100nF 20% 50V 0603
2883	2238 586 59812	100nF 20% 50V 0603
2884	2238 586 59812	100nF 20% 50V 0603
2885	2238 586 59812	100nF 20% 50V 0603
2886	2238 586 59812	100nF 20% 50V 0603
2887	2238 586 59812	100nF 20% 50V 0603
2888	2238 586 59812	100nF 20% 50V 0603
2889	2020 021 91557	100µF 20% 16V
2890	2238 586 59812	100nF 20% 50V 0603
2891	2238 586 59812	100nF 20% 50V 0603
2892	2238 586 59812	100nF 20% 50V 0603
2893	2238 586 59812	100nF 20% 50V 0603
2894	2238 586 59812	100nF 20% 50V 0603
2895	2020 021 91854	10µF 20% 16V
2898	2020 021 91854	10µF 20% 16V
2899	2238 586 59812	100nF 20% 50V 0603
2900	3198 034 04790	27pF 1% 50V 0402
2901	3198 034 04790	27pF 1% 50V 0402
2902	3198 034 04790	27pF 1% 50V 0402
2915	3198 034 01510	150pF 1% 50V 0402
2916	3198 034 01510	150pF 1% 50V 0402
2917	2238 586 59812	100nF 20% 50V 0603
2919	2020 021 91557	100µF 20% 16V
2920	2238 586 59812	100nF 20% 50V 0603
2921	2238 586 59812	100nF 20% 50V 0603
2922	2020 552 96628	10nF 10% 16V 0402
2923	2020 552 96628	10nF 10% 16V 0402
2924	2238 586 59812	100nF 20% 50V 0603
2931	3198 034 01510	150pF 1% 50V 0402
2932	2238 586 59812	100nF 20% 50V 0603
2933	2238 586 59812	100nF 20% 50V 0603
2937	2020 021 91557	100µF 20% 16V
2938	2020 021 91854	10µF 20% 16V
2939	2020 021 91557	100µF 20% 16V
2A00	2020 552 96618	1nF 10% 50V 0402
2A01	2020 552 96618	1nF 10% 50V 0402
2A02	2022 552 05679	1µF 10% 16V 0805
2A03	2020 021 91557	100µF 20% 16V
2A04	2022 552 05679	1µF 10% 16V 0805
2A05	2020 021 91557	100µF 20% 16V
2A06	2020 552 96618	1nF 10% 50V 0402
2A07	2020 552 96618	1nF 10% 50V 0402
2A08	2022 552 05679	1µF 10% 16V 0805
2A10	2238 586 59812	100nF 20% 50V 0603
2A11	2238 586 59812	100nF 20% 50V 0603
2A12	2238 586 59812	100nF 20% 50V 0603
2A13	2238 586 59812	100nF 20% 50V 0603
2A14	2020 552 96618	1nF 10% 50V 0402
2A15	2020 021 91557	100µF 20% 16V
2A16	2238 586 59812	100nF 20% 50V 0603
2A17	2020 552 96618	1nF 10% 50V 0402
2A18	2020 021 91557	100µF 20% 16V
2A19	3198 034 02790	47pF 1% 50V 0402
2A20	2022 552 05679	1µF 10% 16V 0805
2A21	2238 586 59812	100nF 20% 50V 0603
2A22	2238 586 59812	100nF 20% 50V 0603
2A23	2238 586 59812	100nF 20% 50V 0603
2A24	2238 586 59812	100nF 20% 50V 0603
2A25	2238 869 15101	100pF 5% 50V 0402
2A26	2022 552 05679	1µF 10% 16V 0805
2A27	2020 552 96618	1nF 10% 50V 0402
2A29	2238 869 15101	100pF 5% 50V 0402
2A30	2238 869 15101	100pF 5% 50V 0402
2A31	2022 552 05679	1µF 10% 16V 0805
2A32	2238 869 15101	100pF 5% 50V 0402
2A33	2238 586 59812	100nF 20% 50V 0603
2A34	2238 586 59812	100nF 20% 50V 0603
2A35	2020 552 96618	1nF 10% 50V 0402
2A36	2238 869 15101	100pF 5% 50V 0402
2A37	2238 869 15101	100pF 5% 50V 0402
2A38	2022 552 05679	1µF 10% 16V 0805
2A39	2022 552 05679	1µF 10% 16V 0805
2A40	2238 586 59812	100nF 20% 50V 0603
2A41	2020 021 91854	10µF 20% 16V
2A42	2020 021 91854	10µF 20% 16V
2A43	2020 021 91854	10µF 20% 16V
2A44	2238 586 59812	100nF 20% 50V 0603
2A45	2238 586 59812	100nF 20% 50V 0603
2A46	2022 552 05679	1µF 10% 16V 0805
2A47	2022 552 05679	1µF 10% 16V 0805
2A49	2022 552 05679	1µF 10% 16V 0805
2A50	2020 552 96618	1nF 10% 50V 0402
2A53	2022 552 05679	1µF 10% 16V 0805
2A54	2020 552 96618	1nF 10% 50V 0402
2A56	2022 552 05679	1µF 10% 16V 0805
2A59	2022 552 05679	1µF 10% 16V 0805
2A62	2022 552 05679	1µF 10% 16V 0805
2A79	2238 586 59812	100nF 20% 50V 0603
2A91	2238 869 15101	100pF 5% 50V 0402
2A92	2022 552 05679	1µF 10% 16V 0805
2A95	3198 035 02210	220pF 5% 50V 0402
2A99	2022 552 05679	1µF 10% 16V 0805
2AA5	2238 869 15101	100pF 5% 50V 0402
2AA6	2020 552 96618	1nF 10% 50V 0402
2AA7	2020 552 96618	1nF 10% 50V 0402
2AA9	3198 034 05680	5.6pF 1% 50V 0402
2AB0	3198 034 05680	5.6pF 1% 50V 0402
2AB2	2020 552 96618	1nF 10% 50V 0402
2AB3	2022 552 05679	1µF 10% 16V 0805
2AB4	2022 552 05679	1µF 10% 16V 0805
2AB5	2020 021 91854	10µF 20% 16V
2AB6	2020 552 96618	1nF 10% 50V 0402
2AB7	2020 552 96618	1nF 10% 50V 0402
2AB8	2022 552 05679	1µF 10% 16V 0805
2AF3	4822 124 12095	100µF 20% 16V
2AF4	2238 586 59812	100nF 20% 50V 0603
2C00	2238 586 59812	100nF 20% 50V 0603
2C01	2238 586 59812	100nF 20% 50V 0603
2C02	2238 586 59812	100nF 20% 50V 0603
2D04	2020 552 96618	1nF 10% 50V 0402
2D09	2238 586 59812	100nF 20% 50V 0603
2D10	2022 552 05679	1µF 10% 16V 0805
2D11	2020 552 96628	10nF 10% 16V 0402
2D12	2020 552 96628	10nF 10% 16V 0402
2E01	2238 586 59812	100nF 20% 50V 0603
2E02	2238 586 59812	100nF 20% 50V 0603
2E03	2238 586 59812	100nF 20% 50V 0603
2E04	2238 586 59812	100nF 20% 50V 0603
2E06	2238 586 59812	100nF 20% 50V 0603
2E07	2238 586 59812	100nF 20% 50V 0603
2E08	2238 586 59812	100nF 20% 50V 0603
2E09	2238 586 59812	100nF 20% 50V 0603
2E10	2238 586 59812	100nF 20% 50V 0603
2E11	2238 586 59812	100nF 20% 50V 0603
2E12	2238 586 59812	100nF 20% 50V 0603
2E13	2238 586 59812	100nF 20% 50V 0603
2E14	2238 586 59812	100nF 20% 50V 0603
2E15	2238 586 59812	100nF 20% 50V 0603
2E16	2238 586 59812	100nF 20% 50V 0603
2E17	2238 586 59812	100nF 20% 50V 0603
2E18	2238 586 59812	100nF 20% 50V 0603
2E19	2238 586 59812	100nF 20% 50V 0603
2E20	2238 586 59812	100nF 20% 50V 0603
2E21	3198 017 34730	47nF 16V 0603
2E22	4822 126 14519	22pF 5% 50V 0402
2E23	3198 017 34730	47nF 16V 0603
2E24	4822 126 14519	22pF 5% 50V 0402
2E25	3198 017 34730	47nF 16V 0603
2E26	4822 126 14519	22pF 5% 50V 0402
2E27	2238 586 59812	100nF 20% 50V 0603
2E28	3198 017 34730	47nF 16V 0603
2E29	3198 017 33330	33nF 20% 16V 0603
2E34	3198 035 03320	3.3nF 5% 50V 0402
2E35	2238 586 59812	100nF 20% 50V 0603
2E39	2238 869 15109	10pF 5% 50V 0402
2E41	2238 586 59812	100nF 20% 50V 0603
2E42	2020 552 96628	10nF 10% 16V 0402
2E43	2238 586 59812	100nF 20% 50V 0603
2E49	2238 586 59812	100nF 20% 50V 0603
2E50	4822 124 81058	47µF 20% 4V
2E51	2022 552 05679	1µF 10% 16V 0805
2E52	2238 586 59812	100nF 20% 50V 0603
2E54	2238 586 59812	100nF 20% 50V 0603
2E55	2022 552 05679	1µF 10% 16V 0805
2E56	2020 552 96628	10nF 10% 16V 0402
2E57	2020 552 96628	10nF 10% 16V 0402
2E58	2020 552 96628	10nF 10% 16V 0402
2E59	2020 552 96628	10nF 10% 16V 0402
2E62	2238 586 59812	100nF 20% 50V 0603
2E65	2238 586 59812	100nF 20% 50V 0603
2E66	2238 586 59812	100nF 20% 50V 0603
2E67	2238 586 59812	100nF 20% 50V 0603
2E68	2020 552 96628	10nF 10% 16V 0402
2E69	2020 552 96628	10nF 10% 16V 0402
2E70	2020 552 96628	10nF 10% 16V 0402
2E71	2020 552 96628	10nF 10% 16V 0402
2E72	2238 586 59812	100nF 20% 50V 0603
2E73	2238 586 59812	100nF 20% 50V 0603
2E74	2238 586 59812	100nF 20% 50V 0603
2E75	2238 586 59812	100nF 20% 50V 0603
2E77	2238 586 59812	100nF 20% 50V 0603
2E78	2238 586 59812	100nF 20% 50V 0603
2E79	2238 586 59812	100nF 20% 50V 0603
2E80	2238 586 59812	100nF 20% 50V 0603
2E81	2022 552 05679	1µF 10% 16V 0805
2E82	2238 586 59812	100nF 20% 50V 0603
2E83	2238 586 59812	100nF 20% 50V 0603
2E84	2238 586 59812	100nF 20% 50V 0603
2E86	2238 586 59812	100nF 20% 50V 0603
2E87	4822 124 12095	100µF 20% 16V
2E93	2238 586 59812	100nF 20% 50V 0603
2E94	2238 586 59812	100nF 20% 50V 0603
2E96	2238 869 15101	100pF 5% 50V 0402
2E97	2238 869 15101	100pF 5% 50V 0402
2E98	2238 869 15101	100pF 5% 50V 0402
2E99	4822 124 81058	47µF 20% 4V
2I00	2238 869 15101	100pF 5% 50V 0402
2I11	2022 552 05679	1µF 10% 16V 0805
2I12	4822 126 14585	100nF 10% 0805 50V
2I15	2022 552 05679	1µF 10% 16V 0805
2I16	2238 869 15101	100pF 5% 50V 0402
2I17	2238 869 15101	100pF 5% 50V 0402
2I18	2238 869 15101	100pF 5% 50V 0402
2I19	2238 869 15101	100pF 5% 50V 0402
2I20	3198 035 03310	330pF 5% 50V 0402
2I21	2238 869 15101	100pF 5% 50V 0402
2I22	2238 869 15101	100pF 5% 50V 0402
2I23	2238 869 15101	100pF 5% 50V 0402
2I24	2238 869 15101	100pF 5% 50V 0402
2I25	3198 035 03310	330pF 5% 50V 0402
2I26	2238 869 15101	100pF 5% 50V 0402
2I27	2238 869 15101	100pF 5% 50V 0402
2I30	2238 869 15101	100pF 5% 50V 0402
2I32	4822 124 23002	10µF 16V
2I33	2020 552 96618	1nF 10% 50V 0402
2I34	4822 124 23002	10µF 16V
2I36	2238 869 15101	100pF 5% 50V 0402
2I38	2238 869 15101	100pF 5% 50V 0402
2I40	2238 586 59812	100nF 20% 50V 0603
2I46	2020 552 96618	1nF 10% 50V 0402
2I47	2020 552 96618	1nF 10% 50V 0402
2I50	2238 586 59812	100nF 20% 50V 0603
2I57	2238 869 15101	100pF 5% 50V 0402
2I58	2238 869 15101	100pF 5% 50V 0402
2I59	2238 586 59812	100nF 20% 50V 0603
2I64	2238 869 15101	100pF 5% 50V 0402
2I65	2238 869 15101	100pF 5% 50V 0402
2I69	4822 126 14324	33pF 5% 50V 0402
2I70	4822 126 14324	33pF 5% 50V 0402
2I86	4822 126 14324	33pF 5% 50V 0402
2I87	2238 869 15101	100pF 5% 50V 0402
2I88	2238 869 15101	100pF 5% 50V 0402
2I89	2022 552 05679	1µF 10% 16V 0805
2I90	2022 552 05679	1µF 10% 16V 0805
2I91	2238 586 59812	100nF 20% 50V 0603
2I92	2022 552 05679	1µF 10% 16V 0805
2I93	2238 586 59812	100nF 20% 50V 0603
2I94	2238 586 59812	100nF 20% 50V 0603
2I95	2238 586 59812	100nF 20% 50V 0603
2I96	2022 552 05679	1µF 10% 16V 0805

2I97	2238 586 59812	100nF 20% 50V 0603
2I98	2238 586 59812	100nF 20% 50V 0603
2I99	4822 124 23002	10µF 16V
2IA0	4822 124 23002	10µF 16V
2IA1	4822 124 23002	10µF 16V
2IA2	4822 124 23002	10µF 16V
2IA3	2020 552 96618	1nF 10% 50V 0402
2IA4	4822 126 14585	100nF 10% 0805 50V
2IA5	2020 021 91557	100µF 20% 16V
2IA9	2020 021 91557	100µF 20% 16V
2IB0	2238 586 59812	100nF 20% 50V 0603
2IB3	2238 586 59812	100nF 20% 50V 0603
2IB5	2022 552 05679	1µF 10% 16V 0805
2IB8	2238 586 59812	100nF 20% 50V 0603
2IB9	2238 586 59812	100nF 20% 50V 0603
2IC0	4822 124 23002	10µF 16V
2IC1	4822 124 23002	10µF 16V
2IC3	2238 586 59812	100nF 20% 50V 0603
2IC5	2238 586 59812	100nF 20% 50V 0603
2IC6	3198 034 04790	27pF 1% 50V 0402
2IC7	3198 034 04790	27pF 1% 50V 0402
2IC8	2022 552 05679	1µF 10% 16V 0805
2IC9	4822 126 13883	220pF 5% 50V
2IE1	2238 586 59812	100nF 20% 50V 0603
2IE2	2238 586 59812	100nF 20% 50V 0603
2IE3	2022 552 05679	1µF 10% 16V 0805
2IE4	2238 586 59812	100nF 20% 50V 0603
2IE5	2238 586 59812	100nF 20% 50V 0603
2IE6	2238 586 59812	100nF 20% 50V 0603
2IE7	2022 552 05679	1µF 10% 16V 0805
2IE8	2022 552 05679	1µF 10% 16V 0805
2IE9	2238 586 59812	100nF 20% 50V 0603
2IF1	2238 586 59812	100nF 20% 50V 0603
2IF2	2238 586 59812	100nF 20% 50V 0603
2IF3	2238 586 59812	100nF 20% 50V 0603
2IF4	4822 124 80151	47µF 16V
2IF5	2238 586 59812	100nF 20% 50V 0603
2IF8	4822 124 11946	22µF 20% 16V
2IF9	4822 124 11946	22µF 20% 16V
2IG1	2238 586 59812	100nF 20% 50V 0603
2IG2	5322 124 41945	22µF 20% 35V
2IG3	2238 586 59812	100nF 20% 50V 0603
2IG4	2238 586 59812	100nF 20% 50V 0603
2IG5	2238 586 59812	100nF 20% 50V 0603
2IG6	2238 586 59812	100nF 20% 50V 0603
2IG7	2238 586 59812	100nF 20% 50V 0603
2IG8	2238 586 59812	100nF 20% 50V 0603
2IG9	2238 586 59812	100nF 20% 50V 0603
2IH1	2238 586 59812	100nF 20% 50V 0603
2IH2	2238 586 59812	100nF 20% 50V 0603
2IH3	2020 552 96618	1nF 10% 50V 0402
2IH4	2022 552 05679	1µF 10% 16V 0805
2IH5	2238 586 59812	100nF 20% 50V 0603
2IH6	4822 124 11946	22µF 20% 16V
2IH7	4822 124 11946	22µF 20% 16V
2IH8	4822 124 11946	22µF 20% 16V
2IH9	4822 124 11946	22µF 20% 16V
2IJ4	2238 586 59812	100nF 20% 50V 0603
2IJ8	2022 552 05679	1µF 10% 16V 0805
2IJ9	2022 552 05679	1µF 10% 16V 0805
2IK1	2238 780 15654	220nF 10% 16V 0805
2IK5	2238 586 59812	100nF 20% 50V 0603
2IK6	2238 586 59812	100nF 20% 50V 0603
2IK7	2238 586 59812	100nF 20% 50V 0603
2IL0	2238 869 15109	10pF 5% 50V 0402
2IN8	2238 586 59812	100nF 20% 50V 0603
2IN9	2238 586 59812	100nF 20% 50V 0603
2L00	4822 124 23237	22µF 6.3V
2L01	2238 586 59812	100nF 20% 50V 0603
2L02	2238 586 59812	100nF 20% 50V 0603
2L03	2238 586 59812	100nF 20% 50V 0603
2L04	2238 586 59812	100nF 20% 50V 0603
2L05	2238 586 59812	100nF 20% 50V 0603
2L06	2238 586 59812	100nF 20% 50V 0603
2L07	2238 586 59812	100nF 20% 50V 0603
2L08	2238 586 59812	100nF 20% 50V 0603
2L09	2238 586 59812	100nF 20% 50V 0603
2L10	2238 586 59812	100nF 20% 50V 0603
2L11	2238 586 59812	100nF 20% 50V 0603
2L12	2238 586 59812	100nF 20% 50V 0603
2L13	2238 586 59812	100nF 20% 50V 0603
2L14	2238 586 59812	100nF 20% 50V 0603
2L15	2238 586 59812	100nF 20% 50V 0603
2L16	2238 586 59812	100nF 20% 50V 0603
2L17	2238 586 59812	100nF 20% 50V 0603
2L19	4822 124 23237	22µF 6.3V
2L20	2238 586 59812	100nF 20% 50V 0603
2L21	2238 586 59812	100nF 20% 50V 0603
2L25	2238 586 59812	100nF 20% 50V 0603
2L26	3198 017 33330	33nF 20% 16V 0603
2L27	3198 035 14720	4.7nF 5% 25V 0402
2L28	3198 034 03990	39pF 1% 50V 0402
2L29	3198 034 03990	39pF 1% 50V 0402
2L30	3198 034 03990	39pF 1% 50V 0402

2L31	3198 017 34730	47nF 16V 0603
2L32	3198 035 03320	3.3nF 5% 50V 0402
2L33	2238 586 59812	100nF 20% 50V 0603
2L34	2238 586 59812	100nF 20% 50V 0603
2L51	4822 124 23237	22µF 6.3V
2L52	3198 017 34730	47nF 16V 0603
2L54	3198 017 34730	47nF 16V 0603
2L56	2020 552 96618	1nF 10% 50V 0402
2L57	3198 017 34730	47nF 16V 0603
2L58	4822 124 23237	22µF 6.3V
2L60	3198 034 04790	27pF 1% 50V 0402
2P80	4822 124 12095	100µF 20% 16V
2P81	2238 586 59812	100nF 20% 50V 0603
2T01	3198 032 28210	220µF 20% 6.3V
2T04	2238 586 15641	22nF 10% 50V 0603
2T05	3198 032 28210	220µF 20% 6.3V
2T06	2020 552 96628	10nF 10% 16V 0402
2T09	3198 017 34730	47nF 16V 0603
2T12	2238 586 59812	100nF 20% 50V 0603
2T13	2020 552 96628	10nF 10% 16V 0402
2T15	2022 552 05679	1µF 10% 16V 0805
2T21	2020 552 96683	220nF 10% 50V
2T22	2020 552 96683	220nF 10% 50V
2T60	3198 032 28210	220µF 20% 6.3V
2T62	2020 552 96683	220nF 10% 50V
2T63	2020 552 96683	220nF 10% 50V
2U03	2022 552 05679	1µF 10% 16V 0805
2U04	4822 126 14583	470nF 10% 16V 0805
2U05	2020 552 96618	1nF 10% 50V 0402
2U06	2022 552 05635	22µF 10% 16V
2U07	2238 869 15829	82pF 5% 50V 0402
2U08	2022 552 05635	22µF 10% 16V
2U09	2020 552 96618	1nF 10% 50V 0402
2U10	2022 552 05635	22µF 10% 16V
2U11	2020 552 96618	1nF 10% 50V 0402
2U12	2020 552 96628	10nF 10% 16V 0402
2U13	2238 780 15654	220nF 10% 16V 0805
2U14	4822 126 14583	470nF 10% 16V 0805
2U15	4822 124 12095	100µF 20% 16V
2U16	3198 035 14720	4.7nF 5% 25V 0402
2U17	4822 126 14583	470nF 10% 16V 0805
2U18	3198 034 01210	120pF 1% 50V 0402
2U19	2238 586 59812	100nF 20% 50V 0603
2U20	2022 552 05679	1µF 10% 16V 0805
2U21	4822 126 14583	470nF 10% 16V 0805
2U22	2022 552 05679	1µF 10% 16V 0805
2U23	4822 124 12095	100µF 20% 16V
2U24	2020 552 96618	1nF 10% 50V 0402
2U25	2238 586 59812	100nF 20% 50V 0603
2U26	2238 586 59812	100nF 20% 50V 0603
2U27	3198 035 26820	6.8nF 10% 16V 0402
2U28	3198 035 26820	6.8nF 10% 16V 0402
2U30	3198 034 01210	120pF 1% 50V 0402
2U31	4822 124 12095	100µF 20% 16V
2U32	3198 035 03320	3.3nF 5% 50V 0402
2U33	2022 552 05679	1µF 10% 16V 0805
2U34	2238 787 15641	22nF 5% 16V 0402
2U35	2022 552 05679	1µF 10% 16V 0805
2U36	2238 586 59812	100nF 20% 50V 0603
2U37	2020 552 96623	2.2nF 10% 50V 0402
2U39	2238 586 59812	100nF 20% 50V 0603
2U40	2020 552 96623	2.2nF 10% 50V 0402
2U41	3198 035 26820	6.8nF 10% 16V 0402
2U42	3198 017 34730	47nF 16V 0603
2V11	3198 035 04710	470pF 50V 0402
2V12	3198 035 04710	470pF 50V 0402
2Y00	2238 869 15101	100pF 5% 50V 0402
2Y01	2238 869 15101	100pF 5% 50V 0402
2Y02	2238 869 15101	100pF 5% 50V 0402
2Y03	2238 869 15101	100pF 5% 50V 0402
2Y04	2238 869 15101	100pF 5% 50V 0402
2Y07	2238 869 15101	100pF 5% 50V 0402
2Y09	2238 869 15101	100pF 5% 50V 0402
2Y10	2238 869 15101	100pF 5% 50V 0402
2Y12	2238 869 15101	100pF 5% 50V 0402
2Y13	2238 586 59812	100nF 20% 50V 0603
2Y14	2238 869 15101	100pF 5% 50V 0402
2Y15	2238 869 15101	100pF 5% 50V 0402
2Y16	2238 869 15101	100pF 5% 50V 0402
2Y17	2238 869 15101	100pF 5% 50V 0402
2Y18	2238 869 15101	100pF 5% 50V 0402
2Y19	2238 869 15101	100pF 5% 50V 0402
2Y23	2238 869 15101	100pF 5% 50V 0402
2Y25	2238 869 15101	100pF 5% 50V 0402
2Y26	2238 869 15101	100pF 5% 50V 0402
2Y27	2020 552 96618	1nF 10% 50V 0402
2Y28	2020 552 96618	1nF 10% 50V 0402
2Y29	2020 552 96618	1nF 10% 50V 0402
2Y30	4822 124 12095	100µF 20% 16V
2Y31	4822 124 12095	100µF 20% 16V
2Y32	2020 552 96618	1nF 10% 50V 0402
2Y33	2020 552 96618	1nF 10% 50V 0402
2Y34	2238 869 15101	100pF 5% 50V 0402
2Y37	2238 869 15101	100pF 5% 50V 0402

2Y38	2238 869 15101	100pF 5% 50V 0402
2Y39	2238 869 15101	100pF 5% 50V 0402
2Y40	2238 869 15101	100pF 5% 50V 0402
2Y41	2238 869 15101	100pF 5% 50V 0402
2Y42	2238 869 15101	100pF 5% 50V 0402
2Y43	2238 869 15101	100pF 5% 50V 0402
2Y49	2238 869 15101	100pF 5% 50V 0402
2Y50	2238 869 15101	100pF 5% 50V 0402
2Y51	2238 869 15101	100pF 5% 50V 0402
2Y52	2238 787 15641	22nF 5% 16V 0402
2Y53	2238 869 15101	100pF 5% 50V 0402
2Z44	4822 126 14519	22pF 5% 50V 0402
2Z45	4822 126 14519	22pF 5% 50V 0402
2Z46	4822 126 14519	22pF 5% 50V 0402
2Z47	4822 126 14519	22pF 5% 50V 0402
2Z48	4822 126 14519	22pF 5% 50V 0402
2Z49	4822 126 14519	22pF 5% 50V 0402
2Z50	4822 126 14519	22pF 5% 50V 0402
2Z51	4822 126 14519	22pF 5% 50V 0402
2Z52	4822 126 14519	22pF 5% 50V 0402
2Z53	4822 126 14519	22pF 5% 50V 0402
2Z57	4822 117 13605	Jumper 0402
2Z58	2020 552 96628	10nF 10% 16V 0402
2Z58	2238 869 15101	100pF 5% 50V 0402
2Z59	2238 869 15101	100pF 5% 50V 0402
2Z60	2238 869 15101	100pF 5% 50V 0402
2Z61	2238 869 15101	100pF 5% 50V 0402
2Z62	2238 869 15101	100pF 5% 50V 0402

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3001	3198 031 04720	4.7kΩ 5% 0402
3002	3198 031 04720	4.7kΩ 5% 0402
3003	4822 117 13525	24kΩ 1% 0.62W 0603
3005	4822 117 13606	10kΩ 5% 0.01W 0402
3006	4822 117 13543	470Ω 5% 0402
3007	2350 033 10471	4 x 470Ω 5%
3008	2350 033 10101	4 x 100Ω 5%
3009	3198 031 01810	180Ω 5% 0402
3010	4822 117 13606	10kΩ 5% 0.01W 0402
3011	3198 031 04720	4.7kΩ 5% 0402
3012	2350 033 10101	4 x 100Ω 5%
3013	4822 117 13606	10kΩ 5% 0.01W 0402
3014	3198 031 06820	6.8kΩ 5% 0.01W 0402
3016	2322 706 71502	1.5kΩ 1% 0402
3017	3198 031 04720	4.7kΩ 5% 0402
3018	4822 117 13606	10kΩ 5% 0.01W 0402
3019	3198 031 04720	4.7kΩ 5% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3021	4822 117 13606	10kΩ 5% 0.01W 0402
3024	3198 031 02730	27kΩ 5% 0402
3025	4822 117 13596	220Ω 5% 0.01W 0402
3026	3198 031 04720	4.7kΩ 5% 0402
3027	3198 031 04730	47Ω 5% 0402
3029	2350 033 10101	4 x 100Ω 5%
3031	2350 033 10101	4 x 100Ω 5%
3033	4822 117 11297	100kΩ 5% 0.1W
3034	2350 033 10101	4 x 100Ω 5%
3035	2350 033 10101	4 x 100Ω 5%
3038	4822 117 13606	10kΩ 5% 0.01W 0402
3039	4822 117 13597	330Ω 5% 0402 0.01W
3046	2350 033 10101	4 x 100Ω 5%
3048	2350 033 10101	4 x 100Ω 5%
3049	2350 033 10101	4 x 100Ω 5%
3050	2350 033 10101	4 x 100Ω 5%
3051	2350 033 10101	4 x 100Ω 5%
3052	2350 033 10101	4 x 100Ω 5%
3053	4822 117 13606	10kΩ 5% 0.01W 0402
3054	2350 033 10101	4 x 100Ω 5%
3055	2350 033 10101	4 x 100Ω 5%
3056	2350 033 10101	4 x 100Ω 5%
3057	2350 033 10101	4 x 100Ω 5%
3061	2350 033 10101	4 x 100Ω 5%
3062	4822 117 13606	10kΩ 5% 0.01W 0402
3064	2350 033 10101	4 x 100Ω 5%
3065	3198 031 04720	4.7kΩ 5% 0402
3066	3198 031 04730	47Ω 5% 0402
3068	4822 051 30472	4.7Ω 5% 0.062W
3069	3198 031 01820	1.8kΩ 5% 0.01W 0402
3072	2350 033 10101	4 x 100Ω 5%
3073	2350 033 10471	4 x 470Ω 5%
3074	2350 033 10471	4 x 470Ω 5%
3075	2020 552 96628	10nF 10% 16V 0402
3076	2350 033 10471	4 x 470Ω 5%
3077	3198 031 04720	4.7kΩ 5% 0402
3078	2350 033 10471	4 x 470Ω 5%
3079	3198 031 01820	1.8kΩ 5% 0.01W 0402
3080	4822 117 13606	10kΩ 5% 0.01W 0402
3081	4822 117 13543	470Ω 5% 0402
3082	2350 033 10101	4 x 100Ω 5%
3083	2350 033 10101	4 x 100Ω 5%
3084	4822 117 13606	10kΩ 5% 0.01W 0402
3085	2350 033 10101	4 x 100Ω 5%

3086	2350 033 10101	4 x 100Ω 5%
3087	4822 117 13545	100Ω 1% 0402
3088	3198 031 01820	1.8kΩ 5% 0.01W 0402
3089	4822 117 13545	100Ω 1% 0402
3090	2350 033 10471	4 x 470Ω 5%
3092	3198 031 01820	1.8kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3097	4822 117 13543	470Ω 5% 0402
3099	2350 033 10471	4 x 470Ω 5%
3100	4822 117 13596	220Ω 5% 0.01W 0402
3101	4822 117 13596	220Ω 5% 0.01W 0402
3102	2350 033 10101	4 x 100Ω 5%
3103	4822 117 13543	470Ω 5% 0402
3304	2322 750 63908	3.9Ω 5% Fuse 1206
3370	4822 117 13545	100Ω 1% 0402
3371	4822 117 13546	47Ω 5% 0402
3372	4822 117 13543	470Ω 5% 0402
3376	4822 117 13545	100Ω 1% 0402
3377	4822 117 13545	100Ω 1% 0402
3378	3198 031 01530	15kΩ 5% 0.01W 0402
3380	4822 117 13545	100Ω 1% 0402
3382	4822 117 13543	470Ω 5% 0402
3385	4822 117 13543	470Ω 5% 0402
3393	4822 117 11297	100kΩ 5% 0.1W
3400⚠	4822 117 11152	4.7Ω 5%
3402⚠	2322 750 63908	3.9Ω 5% Fuse 1206
3405	4822 117 13548	1kΩ 5% 0402
3408	4822 117 13545	100Ω 1% 0402
3411	3198 031 02720	2.7kΩ 5% 0.01W 0402
3412⚠	4822 117 11152	4.7Ω 5%
3413	3198 031 02710	270Ω 5% 0.1W 0402
3414	3198 031 04720	4.7kΩ 5% 0402
3415	4822 117 13602	2.2kΩ 5% 0.01W 0402
3418	3198 031 03910	390Ω 1% 0402
3419	3198 031 03390	33Ω 1% 0402
3422	4822 117 13548	1kΩ 5% 0402
3435	3198 031 04720	4.7kΩ 5% 0402
3436	3198 031 01810	180Ω 5% 0402
3437	4822 117 13543	470Ω 5% 0402
3439	4822 117 13597	330Ω 5% 0402 0.01W
3441	3198 031 05620	5.6kΩ 5% 0.01W 0402
3445	4822 117 13543	470Ω 5% 0402
3463	3198 031 04720	4.7kΩ 5% 0402
3473	4822 117 13548	1kΩ 5% 0402
3474	3198 031 01090	10Ω 5% 0.01W 0402
3475⚠	5322 117 11726	10Ω 5%
3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	3198 021 38220	8.2kΩ 5% 0.062W 0603
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3700	3198 031 02290	22Ω 5% 0.1W 0402
3701	4822 117 13548	1kΩ 5% 0402
3702	3198 031 01090	10Ω 5% 0.01W 0402
3706	4822 117 13545	100Ω 1% 0402
3707	4822 117 13545	100Ω 1% 0402
3709	4822 117 13545	100Ω 1% 0402
3710	4822 117 13545	100Ω 1% 0402
3712	3198 031 04730	47Ω 5% 0402
3713	4822 117 13605	Jumper 0402
3714	4822 117 13605	Jumper 0402
3715	4822 117 13605	Jumper 0402
3721	4822 117 13545	100Ω 1% 0402
3722	4822 117 13548	1kΩ 5% 0402
3724	4822 117 13545	100Ω 1% 0402
3725	3198 031 03320	3.3kΩ 5% 0402
3726	3198 031 01220	1.2kΩ 5% 0.01W 0402
3727	3198 031 01510	150Ω 5% 0.01W 0402
3728	3198 031 01510	150Ω 5% 0.01W 0402
3729	4822 117 13605	Jumper 0402
3732	3198 031 04730	47Ω 5% 0402
3733	4822 117 13548	1kΩ 5% 0402
3734	4822 117 13545	100Ω 1% 0402
3736	4822 117 13545	100Ω 1% 0402
3737	4822 117 13548	1kΩ 5% 0402
3738	4822 117 13548	1kΩ 5% 0402
3739	3198 031 01230	12kΩ 5% 0402
3740	3198 031 04720	4.7kΩ 5% 0402
3742	4822 117 13601	22kΩ 5% 0402
3743	4822 117 13606	10kΩ 5% 0.01W 0402
3746	3198 031 03920	3.9kΩ 5% 0402
3747	3198 031 04730	47Ω 5% 0402
3748	2322 705 70124	120kΩ 5% 0402
3749	3198 031 03920	3.9kΩ 5% 0402
3750	3198 031 03920	3.9kΩ 5% 0402
3751	3198 031 03320	3.3kΩ 5% 0402
3752	4822 117 13605	Jumper 0402
3753	4822 117 13605	Jumper 0402
3754	4822 117 13545	100Ω 1% 0402
3755	3198 031 04720	4.7kΩ 5% 0402
3756	4822 117 13606	10kΩ 5% 0.01W 0402
3757	3198 031 01510	150Ω 5% 0.01W 0402
3758	3198 031 04720	4.7kΩ 5% 0402
3759	4822 117 13596	220Ω 5% 0.01W 0402
3762	3198 031 06890	68Ω 5% 0402
3763	3198 031 06890	68Ω 5% 0402
3764	3198 031 06890	68Ω 5% 0402
3766	4822 117 13548	1kΩ 5% 0402
3767	3198 031 06890	68Ω 5% 0402
3768	3198 031 06890	68Ω 5% 0402
3769	3198 031 06890	68Ω 5% 0402
3770	3198 031 06890	68Ω 5% 0402
3771	3198 031 07590	75Ω 5% 0402
3772	3198 031 07590	75Ω 5% 0402
3773	3198 031 07590	75Ω 5% 0402
3774	3198 031 06890	68Ω 5% 0402
3775	3198 031 06890	68Ω 5% 0402
3776	3198 031 07590	75Ω 5% 0402
3777	3198 031 06890	68Ω 5% 0402
3778	3198 031 04720	4.7kΩ 5% 0402
3779	3198 031 06890	68Ω 5% 0402
3780	3198 031 06890	68Ω 5% 0402
3781	3198 031 06890	68Ω 5% 0402
3782	4822 117 13548	1kΩ 5% 0402
3784	3198 031 06890	68Ω 5% 0402
3792	3198 031 01510	150Ω 5% 0.01W 0402
3793	4822 117 13602	2.2kΩ 5% 0.01W 0402
3794	3198 031 07590	75Ω 5% 0402
3795	3198 031 01510	150Ω 5% 0.01W 0402
3797	3198 031 04720	4.7kΩ 5% 0402
3800	3198 031 07590	75Ω 5% 0402
3801	3198 031 01510	150Ω 5% 0.01W 0402
3802	3198 031 01510	150Ω 5% 0.01W 0402
3803	3198 031 06890	68Ω 5% 0402
3804	3198 031 06890	68Ω 5% 0402
3805	4822 117 13545	100Ω 1% 0402
3811	3198 031 07590	75Ω 5% 0402
3812	3198 031 07590	75Ω 5% 0402
3814	3198 031 07590	75Ω 5% 0402
3815	3198 031 07590	75Ω 5% 0402
3817	3198 031 07590	75Ω 5% 0402
3818	3198 031 07590	75Ω 5% 0402
3820	3198 031 04720	4.7kΩ 5% 0402
3821	3198 031 03390	33Ω 1% 0402
3823	3198 031 06890	68Ω 5% 0402
3826	4822 117 13545	100Ω 1% 0402
3827	4822 117 13545	100Ω 1% 0402
3829	4822 117 13545	100Ω 1% 0402
3830	3198 031 06890	68Ω 5% 0402
3831	3198 031 06890	68Ω 5% 0402
3832	3198 031 06890	68Ω 5% 0402
3833	3198 031 06890	68Ω 5% 0402
3834	3198 031 06890	68Ω 5% 0402
3835	3198 031 06890	68Ω 5% 0402
3836	3198 031 06890	68Ω 5% 0402
3837	3198 031 06890	68Ω 5% 0402
3838	3198 031 06890	68Ω 5% 0402
3839	3198 031 06890	68Ω 5% 0402
3840	3198 031 06890	68Ω 5% 0402
3841	3198 031 06890	68Ω 5% 0402
3842	3198 031 06890	68Ω 5% 0402
3843	3198 031 06890	68Ω 5% 0402
3844	3198 031 06890	68Ω 5% 0402
3845	3198 031 06890	68Ω 5% 0402
3846	3198 031 04720	4.7kΩ 5% 0402
3853	3198 031 04730	47Ω 5% 0402
3855	3198 031 04720	4.7kΩ 5% 0402
3856	3198 031 01090	10Ω 5% 0.01W 0402
3857	3198 031 01090	10Ω 5% 0.01W 0402
3858	3198 031 01090	10Ω 5% 0.01W 0402
3859	3198 031 01090	10Ω 5% 0.01W 0402
3860	3198 031 01090	10Ω 5% 0.01W 0402
3861	3198 031 01090	10Ω 5% 0.01W 0402
3864	4822 117 13545	100Ω 1% 0402
3865	4822 117 13545	100Ω 1% 0402
3867	4822 117 13545	100Ω 1% 0402
3868	4822 117 13545	100Ω 1% 0402
3869	4822 117 13545	100Ω 1% 0402
3870	4822 117 13545	100Ω 1% 0402
3871	4822 117 13545	100Ω 1% 0402
3872	4822 117 13545	100Ω 1% 0402
3873	4822 117 13545	100Ω 1% 0402
3874	4822 117 13545	100Ω 1% 0402
3880	3198 031 04730	47Ω 5% 0402
3881	3198 031 04730	47Ω 5% 0402
3882	3198 031 04730	47Ω 5% 0402
3883	3198 031 04730	47Ω 5% 0402
3884	3198 031 04730	47Ω 5% 0402
3885	4822 117 13548	1kΩ 5% 0402
3886	4822 117 13548	1kΩ 5% 0402
3887	4822 117 13548	1kΩ 5% 0402
3888	4822 117 13548	1kΩ 5% 0402
3889	4822 117 13548	1kΩ 5% 0402
3890	4822 117 13548	1kΩ 5% 0402
3891	4822 117 13548	1kΩ 5% 0402
3894	3198 031 01510	150Ω 5% 0.01W 0402
3896	4822 117 13605	Jumper 0402
3900	3198 031 06890	68Ω 5% 0402
3901	3198 031 06890	68Ω 5% 0402
3902	3198 031 06890	68Ω 5% 0402
3903	4822 117 11297	100kΩ 5% 0.1W
3905	3198 031 04720	4.7kΩ 5% 0402
3909	4822 117 13545	100Ω 1% 0402
3911	2350 033 11689	4x 68Ω 5% Netw.
3912	2350 033 11689	4x 68Ω 5% Netw.
3913	2350 033 11229	4x 22Ω 5% Netw.
3914	2350 033 11229	4x 22Ω 5% Netw.
3915	2350 033 11229	4x 22Ω 5% Netw.
3916	2350 033 11229	4x 22Ω 5% Netw.
3917	2350 033 11229	4x 22Ω 5% Netw.
3918	3198 031 06890	68Ω 5% 0402
3919	3198 031 06890	68Ω 5% 0402
3921	3198 031 06890	68Ω 5% 0402
3922	4822 117 13596	220Ω 5% 0.01W 0402
3923	3198 031 06810	680Ω 5% 0.01W 0402
3924	4822 117 13596	220Ω 5% 0.01W 0402
3927	4822 117 13596	220Ω 5% 0.01W 0402
3928	3198 031 06810	680Ω 5% 0.01W 0402
3929	4822 117 13596	220Ω 5% 0.01W 0402
3930	4822 117 13596	220Ω 5% 0.01W 0402
3931	4822 117 13596	220Ω 5% 0.01W 0402
3932	3198 031 06810	680Ω 5% 0.01W 0402
3999	4822 051 30102	1kΩ 5% 0.062W
3A00	4822 117 13601	22kΩ 5% 0402
3A01	4822 117 13606	10kΩ 5% 0.01W 0402
3A02	3198 031 04730	47Ω 5% 0402
3A03⚠	4822 117 13568	6.8Ω 5% 1206
3A04	4822 117 13601	22kΩ 5% 0402
3A05	4822 117 13601	22kΩ 5% 0402
3A06	4822 117 11297	100kΩ 5% 0.1W
3A07	4822 117 11297	100kΩ 5% 0.1W
3A09	4822 117 13601	22kΩ 5% 0402
3A11	4822 117 11297	100kΩ 5% 0.1W
3A12	3198 031 04730	47Ω 5% 0402
3A13	3198 031 04730	47Ω 5% 0402
3A14	3198 031 04730	47Ω 5% 0402
3A15	4822 117 11297	100kΩ 5% 0.1W
3A16	4822 117 13545	100Ω 1% 0402
3A17	4822 117 13545	100Ω 1% 0402
3A18	3198 031 06830	68kΩ 5% 0.01W 0402
3A19	4822 117 13545	100Ω 1% 0402
3A20	4822 117 11297	100kΩ 5% 0.1W
3A21	3198 031 06830	68kΩ 5% 0.01W 0402
3A22	4822 117 11297	100kΩ 5% 0.1W
3A23	3198 031 06830	68kΩ 5% 0.01W 0402
3A24	3198 031 06810	680Ω 5% 0.01W 0402
3A26	3198 031 06830	68kΩ 5% 0.01W 0402
3A27	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A28	3198 031 06820	6.8kΩ 5% 0.01W 0402
3A40	3198 031 01830	18kΩ 5% 0.01W 0402
3A45	3198 031 04730	47Ω 5% 0402
3A46	3198 031 01530	15kΩ 5% 0.01W 0402
3A47	3198 031 04730	47Ω 5% 0402
3A49	3198 031 01830	18kΩ 5% 0.01W 0402
3A51	3198 031 01530	15kΩ 5% 0.01W 0402
3A52	3198 031 05630	56kΩ 5% 0402
3A53	3198 031 05630	56kΩ 5% 0402
3A55	4822 117 13597	330Ω 5% 0402 0.01W
3A60	4822 117 11297	100kΩ 5% 0.1W
3A61	4822 117 13597	330Ω 5% 0402 0.01W
3A63	4822 117 13601	22kΩ 5% 0402
3A64	3198 031 04730	47Ω 5% 0402
3A65	4822 117 11297	100kΩ 5% 0.1W
3A66	4822 117 11297	100kΩ 5% 0.1W
3A67	4822 117 13543	470Ω 5% 0402
3C00	4822 117 13602	2.2kΩ 5% 0.01W 0402

3C01	3198 031 01090	10Ω 5% 0.01W 0402
3C03	4822 117 13606	10kΩ 5% 0.01W 0402
3C04	4822 117 13606	10kΩ 5% 0.01W 0402
3C05	4822 117 13543	470Ω 5% 0402
3C08	4822 051 30103	10kΩ 5% 0.062W
3C10	4822 117 13545	100Ω 1% 0402
3C11	4822 117 13545	100Ω 1% 0402
3C12	3198 031 06890	68Ω 5% 0402
3E00	4822 117 13606	10kΩ 5% 0.01W 0402
3E01	4822 117 13548	1kΩ 5% 0402
3E02	4822 117 13548	1kΩ 5% 0402
3E03	4822 117 13548	1kΩ 5% 0402
3E04	4822 117 13548	1kΩ 5% 0402
3E05	3198 031 01520	1.2kΩ 5% 0.01W 0402
3E06	4822 117 13545	100Ω 1% 0402
3E07	4822 117 13545	100Ω 1% 0402
3E08	4822 117 13545	100Ω 1% 0402
3E11	4822 117 13543	470Ω 5% 0402
3E12	4822 117 13543	470Ω 5% 0402
3E14	4822 117 13548	1kΩ 5% 0402
3E16	3198 031 02720	2.7kΩ 5% 0.01W 0402
3E18	4822 117 13545	100Ω 1% 0402
3E19	4822 117 13545	100Ω 1% 0402
3E37	4822 117 13545	100Ω 1% 0402
3E50	4822 117 13606	10kΩ 5% 0.01W 0402
3E51	4822 117 13606	10kΩ 5% 0.01W 0402
3E52	4822 117 13606	10kΩ 5% 0.01W 0402
3E53	4822 117 13606	10kΩ 5% 0.01W 0402
3E54	4822 117 13546	47Ω 5% 0402
3E55	4822 117 13606	10kΩ 5% 0.01W 0402
3E56	4822 117 13603	33kΩ 5% 0402
3E57	4822 117 11297	100kΩ 5% 0.1W
3E58	4822 117 13546	47Ω 5% 0402
3E59	4822 117 13606	10kΩ 5% 0.01W 0402
3E61	4822 117 13546	47Ω 5% 0402
3E62	4822 117 13548	1kΩ 5% 0402
3E63	4822 117 13606	10kΩ 5% 0.01W 0402
3E64	4822 117 13606	10kΩ 5% 0.01W 0402
3E69	3198 031 04720	4.7kΩ 5% 0402
3E70	3198 031 04720	4.7kΩ 5% 0402
3E73	4822 117 13606	10kΩ 5% 0.01W 0402
3E74	4822 117 13546	47Ω 5% 0402
3E77	4822 117 13546	47Ω 5% 0402
3E78	4822 117 13546	47Ω 5% 0402
3E79	4822 117 13546	47Ω 5% 0402
3E80	4822 117 13546	47Ω 5% 0402
3E81	4822 117 13546	47Ω 5% 0402
3E82	3198 031 01090	10Ω 5% 0.01W 0402
3E83	3198 031 01090	10Ω 5% 0.01W 0402
3E84	3198 031 01090	10Ω 5% 0.01W 0402
3E85	3198 031 01090	10Ω 5% 0.01W 0402
3E86	3198 031 01090	10Ω 5% 0.01W 0402
3E88	4822 117 13546	47Ω 5% 0402
3E89	4822 117 13546	47Ω 5% 0402
3E90	3198 031 06890	68Ω 5% 0402
3E91	3198 031 03390	33Ω 1% 0402
3I07	4822 117 13606	10kΩ 5% 0.01W 0402
3I08	4822 117 13597	330Ω 5% 0402 0.01W
3I28	4822 117 13545	100Ω 1% 0402
3I29	4822 051 30759	75Ω 5% 0.062W
3I30	4822 051 30759	75Ω 5% 0.062W
3I31	4822 051 30759	75Ω 5% 0.062W
3I32	4822 117 13548	1kΩ 5% 0402
3I33	4822 051 30101	100Ω 5% 0.062W
3I34	4822 117 13606	10kΩ 5% 0.01W 0402
3I35	4822 051 30101	100Ω 5% 0.062W
3I36	4822 117 13601	22kΩ 5% 0402
3I37	4822 117 13601	22kΩ 5% 0402
3I38	4822 117 13601	22kΩ 5% 0402
3I40	4822 051 30101	100Ω 5% 0.062W
3I41	4822 117 13548	1kΩ 5% 0402
3I42	4822 117 13548	1kΩ 5% 0402
3I44	4822 117 13606	10kΩ 5% 0.01W 0402
3I45	3198 031 04730	47Ω 5% 0402
3I46	4822 117 13545	100Ω 1% 0402
3I47	4822 117 13602	2.2kΩ 5% 0.01W 0402
3I49	4822 117 13545	100Ω 1% 0402
3I50	4822 051 30271	270Ω 5% 0.062W
3I51	4822 051 30101	100Ω 5% 0.062W
3I52	4822 051 30271	270Ω 5% 0.062W
3I53	4822 051 30101	100Ω 5% 0.062W
3I54	4822 051 30101	100Ω 5% 0.062W
3I55	4822 051 30759	75Ω 5% 0.062W
3I56	4822 051 30101	100Ω 5% 0.062W
3I57	4822 051 30759	75Ω 5% 0.062W
3I58	4822 051 30101	100Ω 5% 0.062W
3I59	4822 051 30759	75Ω 5% 0.062W
3I60	4822 051 30759	75Ω 5% 0.062W
3I61	4822 051 30101	100Ω 5% 0.062W
3I62	4822 051 30101	100Ω 5% 0.062W
3I63	4822 051 30392	3.9Ω 5% 0.063W 0603
3I64	3198 031 08220	8.2kΩ 5% 0.5W
3I65	4822 051 30101	100Ω 5% 0.062W
3I66	4822 051 30759	75Ω 5% 0.062W
3I67	4822 051 30759	75Ω 5% 0.062W
3I68	4822 051 30101	100Ω 5% 0.062W
3I69	4822 051 30271	270Ω 5% 0.062W
3I70	4822 051 30101	100Ω 5% 0.062W
3I71	4822 051 30271	270Ω 5% 0.062W
3I72	4822 051 30101	100Ω 5% 0.062W
3I75	4822 051 30101	100Ω 5% 0.062W
3I76	4822 051 30101	100Ω 5% 0.062W
3I77	4822 051 30759	75Ω 5% 0.062W
3I78	4822 051 30759	75Ω 5% 0.062W
3I79	4822 051 30101	100Ω 5% 0.062W
3I80	4822 051 30101	100Ω 5% 0.062W
3I81	3198 031 08220	8.2kΩ 5% 0.5W
3I82	4822 051 30392	3.9Ω 5% 0.063W 0603
3I83	4822 051 30101	100Ω 5% 0.062W
3I84	4822 051 30759	75Ω 5% 0.062W
3I86	4822 051 30759	75Ω 5% 0.062W
3I87	4822 051 30101	100Ω 5% 0.062W
3I88	4822 051 30759	75Ω 5% 0.062W
3I89	4822 051 30271	270Ω 5% 0.062W
3I90	4822 051 30101	100Ω 5% 0.062W
3I91	4822 051 30271	270Ω 5% 0.062W
3I92	4822 051 30101	100Ω 5% 0.062W
3I98	4822 117 13605	Jumper 0402
3I99	4822 051 30271	270Ω 5% 0.062W
3IA0	4822 051 30101	100Ω 5% 0.062W
3IA2	4822 051 30101	100Ω 5% 0.062W
3IA3	4822 117 13601	22kΩ 5% 0402
3IA4	4822 117 13548	1kΩ 5% 0402
3IA5	4822 117 13548	1kΩ 5% 0402
3IA6	4822 117 13548	1kΩ 5% 0402
3IA7	4822 117 13548	1kΩ 5% 0402
3IA8	4822 117 13548	1kΩ 5% 0402
3IB1	4822 117 13606	10kΩ 5% 0.01W 0402
3IB2	4822 117 13545	100Ω 1% 0402
3IB3	4822 117 13606	10kΩ 5% 0.01W 0402
3IB4	4822 117 13601	22kΩ 5% 0402
3IB5	4822 117 13601	22kΩ 5% 0402
3IB6	4822 117 13548	1kΩ 5% 0402
3IB7	4822 117 13597	330Ω 5% 0402 0.01W
3IBA	4822 117 13545	100Ω 1% 0402
3IBB	4822 117 13545	100Ω 1% 0402
3IC0	4822 117 13548	1kΩ 5% 0402
3IC1▲	4822 117 13574	1.5Ω 5% 1206
3IC2	4822 117 13601	22kΩ 5% 0402
3IC3	4822 117 13601	22kΩ 5% 0402
3IC4	4822 117 13545	100Ω 1% 0402
3IC5	4822 117 13596	220Ω 5% 0.01W 0402
3IC6	4822 117 13545	100Ω 1% 0402
3IC7	4822 117 13596	220Ω 5% 0.01W 0402
3IC9	4822 117 13601	22kΩ 5% 0402
3ID0	3198 031 04720	4.7kΩ 5% 0402
3ID1	3198 031 01540	150kΩ 5% 0402
3ID4	3198 031 01230	12kΩ 5% 0402
3ID5	3198 031 01090	10Ω 5% 0.01W 0402
3ID7	4822 117 11297	100kΩ 5% 0.1W
3ID8	4822 117 11297	100kΩ 5% 0.1W
3IE2	4822 117 13545	100Ω 1% 0402
3IE3	4822 117 13545	100Ω 1% 0402
3IE7	3198 031 01090	10Ω 5% 0.01W 0402
3IE9	4822 117 13601	22kΩ 5% 0402
3IF0	4822 117 13545	100Ω 1% 0402
3IF5	4822 117 13601	22kΩ 5% 0402
3IF6	4822 051 30101	100Ω 5% 0.062W
3IF7	4822 051 30101	100Ω 5% 0.062W
3IG1	3198 031 01090	10Ω 5% 0.01W 0402
3IG4	3198 031 01090	10Ω 5% 0.01W 0402
3IG7	3198 031 01090	10Ω 5% 0.01W 0402
3IGE	4822 117 13606	10kΩ 5% 0.01W 0402
3IGF	3198 031 04730	47Ω 5% 0402
3IH1	3198 031 04730	47Ω 5% 0402
3IH2	3198 031 04730	47Ω 5% 0402
3IH8	3198 031 04730	47Ω 5% 0402
3IH9	3198 031 04730	47Ω 5% 0402
3IHA	4822 117 13545	100Ω 1% 0402
3IHB	4822 117 13545	100Ω 1% 0402
3IHC	4822 117 13545	100Ω 1% 0402
3IHG	3198 021 31820	1.8kΩ 5% 0.062W 0603
3II0	4822 117 13606	10kΩ 5% 0.01W 0402
3II1	4822 117 13601	22kΩ 5% 0402
3II2	4822 117 13601	22kΩ 5% 0402
3II3	3198 031 04730	47Ω 5% 0402
3II4	3198 031 04730	47Ω 5% 0402
3II6	4822 117 13601	22kΩ 5% 0402
3II7	4822 117 13601	22kΩ 5% 0402
3II9	4822 117 13548	1kΩ 5% 0402
3IJ8	4822 117 13548	1kΩ 5% 0402
3IK0	4822 117 13548	1kΩ 5% 0402
3IK2	4822 117 13601	22kΩ 5% 0402
3IK3	4822 117 13601	22kΩ 5% 0402
3IK7▲	4822 117 11152	4.7Ω 5%
3IN1	4822 117 13548	1kΩ 5% 0402
3IN4▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IN5	4822 117 13601	22kΩ 5% 0402
3IN6	4822 117 13601	22kΩ 5% 0402
3IN8	3198 031 01090	10Ω 5% 0.01W 0402
3IO5	4822 117 13606	10kΩ 5% 0.01W 0402
3IO6	4822 117 13606	10kΩ 5% 0.01W 0402
3IP0	3198 031 08220	8.2kΩ 5% 0.5W
3IP1	4822 117 13602	2.2kΩ 5% 0.01W 0402
3IP2	4822 117 13596	220Ω 5% 0.01W 0402
3IP3	4822 051 30759	75Ω 5% 0.062W
3IP4	3198 031 02710	270Ω 5% 0.1W 0402
3IP5▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IP6	4822 117 13548	1kΩ 5% 0402
3IP7	3198 031 02720	2.7kΩ 5% 0.01W 0402
3IP8	4822 117 13548	1kΩ 5% 0402
3IQ0	3198 031 01090	10Ω 5% 0.01W 0402
3IQ5	3198 031 04730	47Ω 5% 0402
3IQ6	4822 117 13545	100Ω 1% 0402
3IQ7	4822 117 13545	100Ω 1% 0402
3IQ8	3198 031 03320	3.3kΩ 5% 0402
3IQ9	4822 117 13548	1kΩ 5% 0402
3IR1	3198 031 02710	270Ω 5% 0.1W 0402
3IR2	3198 031 04720	4.7kΩ 5% 0402
3IR3	3198 031 04720	4.7kΩ 5% 0402
3IR4	4822 117 13545	100Ω 1% 0402
3IR5	4822 117 13546	47Ω 5% 0402
3IR6	4822 117 13546	47Ω 5% 0402
3IR7	4822 117 13543	470Ω 5% 0402
3IR8	3198 031 03320	3.3kΩ 5% 0402
3IR9	2322 706 71201	120Ω 1% 0402
3IS0	2322 706 71201	120Ω 1% 0402
3IS1	2322 706 71201	120Ω 1% 0402
3IS2	4822 117 13545	100Ω 1% 0402
3IS5	2322 706 71201	120Ω 1% 0402
3IT0	3198 031 04730	47Ω 5% 0402
3IT1	3198 031 04730	47Ω 5% 0402
3IT4	3198 031 04730	47Ω 5% 0402
3IT5	2322 706 71201	120Ω 1% 0402
3IT6	2322 706 71201	120Ω 1% 0402
3IT7	4822 117 13548	1kΩ 5% 0402
3IT8	4822 117 13548	1kΩ 5% 0402
3IT9	4822 117 13597	330Ω 5% 0402 0.01W
3IU0▲	4822 117 11748	Fuse 2.2Ω 5% 1206
3IV0	3198 031 08220	8.2kΩ 5% 0.5W
3IV1	4822 117 13548	1kΩ 5% 0402
3IV2	4822 117 13543	470Ω 5% 0402
3IV3	4822 117 13548	1kΩ 5% 0402
3L03	4822 117 13545	100Ω 1% 0402
3L04	4822 117 13545	100Ω 1% 0402
3L05	4822 117 13545	100Ω 1% 0402
3L06	4822 117 13545	100Ω 1% 0402
3L08	3198 031 02720	2.7kΩ 5% 0.01W 0402
3L11	4822 117 13545	100Ω 1% 0402
3L12	4822 117 13543	470Ω 5% 0402
3L28	4822 117 13543	470Ω 5% 0402
3L29	3198 031 01510	150Ω 5% 0.01W 0402
3L30	3198 031 01510	150Ω 5% 0.01W 0402
3L31	3198 031 01510	150Ω 5% 0.01W 0402
3L32	4822 117 13543	470Ω 5% 0402
3L33	4822 117 13543	470Ω 5% 0402
3P65	4822 117 13545	100Ω 1% 0402
3P66	4822 117 13545	100Ω 1% 0402
3P67	3198 031 04720	4.7kΩ 5% 0402
3P69	3198 031 04720	4.7kΩ 5% 0402
3P70	3198 031 04720	4.7kΩ 5% 0402
3P72	3198 031 04720	4.7kΩ 5% 0402
3U01	4822 051 30102	1kΩ 5% 0.062W
3U02	4822 117 13548	1kΩ 5% 0402
3U03	4822 117 13603	33kΩ 5% 0402
3U04	4822 051 20121	120Ω 5% 0.1W
3U05	4822 117 13548	1kΩ 5% 0402
3U06	4822 117 13543	470Ω 5% 0402
3U07	3198 031 02290	22Ω 5% 0.1W 0402
3U08	2322 706 71502	1.5kΩ 1% 0402
3U09	3198 031 05620	5.6kΩ 5% 0.01W 0402
3U10	4822 117 13596	220Ω 5% 0.01W 0402
3U12	4822 117 13601	22kΩ 5% 0402
3U13	4822 117 13606	10kΩ 5% 0.01W 0402
3U14	4822 051 30102	1kΩ 5% 0.062W
3U15	2322 706 73302	3.3kΩ 1% 0402
3U17	3198 031 04780	4.7Ω 5% 0402
3U18	2322 706 71002	1kΩ 1% 0402
3U19	3198 031 04720	4.7kΩ 5% 0402
3U20	2322 706 71002	1kΩ 1% 0402
3U21	3198 031 04730	47Ω 5% 0402
3U22	3198 031 02710	270Ω 5% 0.1W 0402
3U23	3198 031 01090	10Ω 5% 0.01W 0402
3U24	4822 117 13601	22kΩ 5% 0402
3U25	3198 031 02240	220kΩ 5% 0.1W 0402
3U26	4822 117 13601	22kΩ 5% 0402
3U27	4822 117 13601	22kΩ 5% 0402
3U28	3198 031 04730	47Ω 5% 0402
3U29	4822 051 30109	10Ω 5% 0.062W
3U30	4822 051 20121	120Ω 5% 0.1W
3U31	4822 051 20121	120Ω 5% 0.1W
3U32	3198 031 01830	18kΩ 5% 0.01W 0402

3U33	4822 117 13606	10kΩ 5% 0.01W 0402
3U35	4822 117 13606	10kΩ 5% 0.01W 0402
3U36	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U37	4822 117 13601	22kΩ 5% 0402
3U38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U39	4822 117 13601	22kΩ 5% 0402
3U40	3198 031 01540	150kΩ 5% 0402
3U41	4822 117 13548	1kΩ 5% 0402
3U42	4822 117 13606	10kΩ 5% 0.01W 0402
3U43	4822 117 13601	22kΩ 5% 0402
3U44	3198 031 01050	1MΩ 5% 0402
3U45	3198 031 01050	1MΩ 5% 0402
3U46	2322 706 74703	47kΩ 1% 0402
3U51	9965 000 23109	22Ω 5% 0603
3U52	4822 051 30102	1kΩ 5% 0.062W
3U53	3198 031 01830	18kΩ 5% 0.01W 0402
3U54	4822 117 13545	100Ω 1% 0402
3U55	4822 051 30102	1kΩ 5% 0.062W
3U56	3198 031 04720	4.7kΩ 5% 0402
3U57	4822 117 13606	10kΩ 5% 0.01W 0402
3U60	4822 117 13548	1kΩ 5% 0402
3U61	4822 117 13606	10kΩ 5% 0.01W 0402
3U62	4822 117 13548	1kΩ 5% 0402
3U63	4822 117 13602	2.2kΩ 5% 0.01W 0402
3U64	4822 117 13548	1kΩ 5% 0402
3U65	4822 117 13548	1kΩ 5% 0402
3U66	4822 117 13606	10kΩ 5% 0.01W 0402
3U67	4822 117 13545	100Ω 1% 0402
3U68	4822 117 13606	10kΩ 5% 0.01W 0402
3U69	4822 117 13548	1kΩ 5% 0402
3U70	4822 051 30102	1kΩ 5% 0.062W
3V01	3198 031 01810	180Ω 5% 0402
3V02	3198 031 01810	180Ω 5% 0402
3V17	3198 031 01810	180Ω 5% 0402
3V19	3198 031 01810	180Ω 5% 0402
3V20	3198 031 01810	180Ω 5% 0402
3V21	2350 033 11689	4x 68Ω 5% Netw.
3V22	2350 033 11689	4x 68Ω 5% Netw.
3V23	2350 033 11689	4x 68Ω 5% Netw.
3V24	2350 033 11689	4x 68Ω 5% Netw.
3V25	3198 031 01810	180Ω 5% 0402
3V26	3198 031 01810	180Ω 5% 0402
3V27	3198 031 01810	180Ω 5% 0402
3V28	3198 031 01810	180Ω 5% 0402
3V29	3198 031 01810	180Ω 5% 0402
3V30	3198 031 01810	180Ω 5% 0402
3V31	3198 031 01810	180Ω 5% 0402
3V32	3198 031 01810	180Ω 5% 0402
3V33	3198 031 01810	180Ω 5% 0402
3V34	3198 031 01810	180Ω 5% 0402
3V35	4822 117 13545	100Ω 1% 0402
3V36	4822 117 13545	100Ω 1% 0402
3V37	4822 117 13545	100Ω 1% 0402
3V38	4822 117 13545	100Ω 1% 0402
3V39	3198 031 04720	4.7kΩ 5% 0402
3V40	4822 117 13545	100Ω 1% 0402
3V50	4822 117 13606	10kΩ 5% 0.01W 0402
3V51	4822 117 13606	10kΩ 5% 0.01W 0402
3V52	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V53	4822 117 13602	2.2kΩ 5% 0.01W 0402
3V54	4822 117 13606	10kΩ 5% 0.01W 0402
3V55	4822 117 13606	10kΩ 5% 0.01W 0402
3V56	4822 117 13545	100Ω 1% 0402
3Y04	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y05	4822 117 13545	100Ω 1% 0402
3Y07▲	4822 117 11151	1Ω 5%
3Y08	3198 031 03320	3.3kΩ 5% 0402
3Y08	4822 117 13545	100Ω 1% 0402
3Y09	4822 117 13545	100Ω 1% 0402
3Y10	4822 117 13545	100Ω 1% 0402
3Y11	4822 117 13545	100Ω 1% 0402
3Y12	4822 117 13545	100Ω 1% 0402
3Y14	3198 031 04720	4.7kΩ 5% 0402
3Y15	4822 117 13606	10kΩ 5% 0.01W 0402
3Y16	3198 031 04720	4.7kΩ 5% 0402
3Y17	4822 117 13545	100Ω 1% 0402
3Y19	4822 117 13545	100Ω 1% 0402
3Y20	3198 031 06890	68Ω 5% 0402
3Y21	3198 031 06890	68Ω 5% 0402
3Y22	3198 031 06890	68Ω 5% 0402
3Y23	3198 031 06890	68Ω 5% 0402
3Y24	4822 117 11297	100kΩ 5% 0.1W
3Y25	4822 117 13545	100Ω 1% 0402
3Y30	3198 031 05620	5.6kΩ 5% 0.01W 0402
3Y34	4822 117 13545	100Ω 1% 0402
3Y35	4822 117 13545	100Ω 1% 0402
3Y36	4822 117 13545	100Ω 1% 0402
3Y37	3198 031 04720	4.7kΩ 5% 0402
3Y38	4822 117 13602	2.2kΩ 5% 0.01W 0402
3Y39	4822 117 13606	10kΩ 5% 0.01W 0402
3Y40	4822 117 13545	100Ω 1% 0402
3Z26	4822 117 13548	1kΩ 5% 0402
3Z34	4822 117 13601	22kΩ 5% 0402
3Z37	4822 117 13606	10kΩ 5% 0.01W 0402

3Z50	4822 117 13545	100Ω 1% 0402
3Z51	4822 117 13545	100Ω 1% 0402
3Z52	4822 117 13545	100Ω 1% 0402
3Z54	4822 117 13545	100Ω 1% 0402
3Z54	4822 117 13548	1kΩ 5% 0402
9001	4822 117 13605	Jumper 0402
9002	4822 117 13605	Jumper 0402
9007	4822 117 13605	Jumper 0402
9010	4822 117 13605	Jumper 0402
9011▲	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9023	4822 117 13605	Jumper 0402
9024	4822 117 13605	Jumper 0402
9316	4822 117 13605	Jumper 0402
9322	4822 117 13605	Jumper 0402
9410	4822 117 13605	Jumper 0402
9413	4822 117 13605	Jumper 0402
9416	4822 117 13605	Jumper 0402
9417	4822 117 13605	Jumper 0402
9418	4822 117 13605	Jumper 0402
9419	4822 117 13605	Jumper 0402
9420	4822 117 13605	Jumper 0402
9423	4822 117 13605	Jumper 0402
9424	4822 117 13605	Jumper 0402
9425	4822 117 13605	Jumper 0402
9426	4822 117 13605	Jumper 0402
9427	4822 117 13545	100Ω 1% 0402
9428	4822 117 13605	Jumper 0402
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9521	4822 051 30008	Jumper 0603
9524	4822 051 30008	Jumper 0603
9702	4822 117 13605	Jumper 0402
9704	4822 117 13605	Jumper 0402
9706	4822 117 13605	Jumper 0402
9707	2238 869 15189	18pF 5% 50V 0402
9708	2238 869 15189	18pF 5% 50V 0402
9709	2238 869 15189	18pF 5% 50V 0402
9710	4822 117 13605	Jumper 0402
9713	4822 117 13605	Jumper 0402
9714	4822 117 13605	Jumper 0402
9715	4822 117 13605	Jumper 0402
9716	4822 117 13605	Jumper 0402
9717	4822 117 13605	Jumper 0402
9718	4822 117 13605	Jumper 0402
9720	4822 117 13605	Jumper 0402
9721	4822 117 13605	Jumper 0402
9722	4822 117 13605	Jumper 0402
9723	4822 117 13605	Jumper 0402
9727	4822 117 13605	Jumper 0402
9728	4822 117 13605	Jumper 0402
9730	4822 117 13605	Jumper 0402
9732	4822 117 13605	Jumper 0402
9751	4822 117 13605	Jumper 0402
9752	4822 117 13605	Jumper 0402
9753	4822 117 13605	Jumper 0402
9754	4822 117 13605	Jumper 0402
9755	4822 117 13605	Jumper 0402
9756	4822 117 13605	Jumper 0402
9757	4822 117 13605	Jumper 0402
9758	4822 117 13605	Jumper 0402
9760	4822 117 13605	Jumper 0402
9761	4822 117 13605	Jumper 0402
9762	4822 117 13605	Jumper 0402
9763	4822 117 13605	Jumper 0402
9765	4822 117 13605	Jumper 0402
9766	4822 117 13605	Jumper 0402
9772	4822 117 13605	Jumper 0402
9773	4822 117 13605	Jumper 0402
9774	4822 117 13605	Jumper 0402
9775	4822 117 13605	Jumper 0402
9776	4822 117 13605	Jumper 0402
9777	4822 117 13605	Jumper 0402
9800	4822 117 13605	Jumper 0402
9801	4822 117 13605	Jumper 0402
9802	4822 117 13605	Jumper 0402
9803	4822 117 13605	Jumper 0402
9804	4822 117 13605	Jumper 0402
9805	4822 117 13605	Jumper 0402
9806	4822 117 13605	Jumper 0402
9808	4822 117 13605	Jumper 0402
9809	4822 117 13605	Jumper 0402
9811	4822 117 13605	Jumper 0402
9812	4822 117 13605	Jumper 0402
9815	4822 117 13605	Jumper 0402
9816	4822 117 13605	Jumper 0402
9817	4822 117 13605	Jumper 0402
9818	4822 117 13605	Jumper 0402
9820	4822 117 13605	Jumper 0402
9821	4822 117 13605	Jumper 0402
9822	4822 117 13605	Jumper 0402
9823	3198 031 06890	68Ω 5% 0402
9A00	4822 117 13605	Jumper 0402

9A01	4822 117 13605	Jumper 0402
9A04	4822 117 13605	Jumper 0402
9A05	4822 117 13605	Jumper 0402
9A06	4822 117 13605	Jumper 0402
9A07	4822 117 13605	Jumper 0402
9A22	4822 117 13605	Jumper 0402
9A65	4822 117 13605	Jumper 0402
9A67	4822 051 20008	Jumper 0805
9A71	4822 051 20008	Jumper 0805
9C02	4822 117 13605	Jumper 0402
9E60	4822 117 13605	Jumper 0402
9E62	4822 117 13605	Jumper 0402
9E65	4822 117 13605	Jumper 0402
9E66	4822 117 13605	Jumper 0402
9E67	4822 117 13605	Jumper 0402
9E68	4822 117 13605	Jumper 0402
9E69	4822 117 13605	Jumper 0402
9E70	4822 117 13605	Jumper 0402
9E71	4822 117 13605	Jumper 0402
9E72	4822 117 13605	Jumper 0402
9E73	4822 117 13605	Jumper 0402
9E74	4822 117 13605	Jumper 0402
9E76	4822 117 13605	Jumper 0402
9E77	4822 117 13605	Jumper 0402
9I00	4822 117 13605	Jumper 0402
9I02	4822 117 13605	Jumper 0402
9I07	4822 117 13605	Jumper 0402
9I15	4822 117 13605	Jumper 0402
9I28	4822 117 13605	Jumper 0402
9I30	4822 117 13605	Jumper 0402
9I31	4822 117 13605	Jumper 0402
9I32	4822 117 13605	Jumper 0402
9I33	4822 117 13605	Jumper 0402
9I34	4822 117 13605	Jumper 0402
9I35	4822 117 13605	Jumper 0402
9I39	4822 117 13605	Jumper 0402
9I45	4822 117 13605	Jumper 0402
9I49	4822 117 13605	Jumper 0402
9I68	4822 117 13605	Jumper 0402
9I85	4822 117 13605	Jumper 0402
9IA5	4822 117 13605	Jumper 0402
9ID0	4822 117 13605	Jumper 0402
9ID1	4822 117 13605	Jumper 0402
9ID3	4822 117 13605	Jumper 0402
9ID5	4822 117 13605	Jumper 0402
9ID8	4822 117 13605	Jumper 0402
9ID9	4822 117 13605	Jumper 0402
9P69	4822 117 13605	Jumper 0402
9P70	4822 117 13605	Jumper 0402
9P71	4822 117 13605	Jumper 0402
9T01	4822 117 13601	22kΩ 5% 0402
9T04	4822 117 13605	Jumper 0402
9T07	4822 117 13605	Jumper 0402
9T08	4822 117 13605	Jumper 0402
9T12	4822 117 13605	Jumper 0402
9T14	4822 117 13605	Jumper 0402
9T50	4822 117 13605	Jumper 0402
9Y00	3198 031 01090	10Ω 5% 0.01W 0402
9Y03	4822 117 13605	Jumper 0402
9Y05	4822 117 13605	Jumper 0402
9Y06	4822 117 13605	Jumper 0402
9Y09	4822 117 13605	Jumper 0402
9Y13	4822 117 13605	Jumper 0402
9Y15	4822 117 13605	Jumper 0402
9Y16	4822 117 13605	Jumper 0402

5003	2422 549 43769	Bead 30Ω at 100MHz
5401	3198 018 56880	6.8µH 10% 0603
5404	4822 157 11506	Bead 120Ω at 100MHz
5405	4822 157 11506	Bead 120Ω at 100MHz
5406	3198 018 52280	2.2µF 10% 1008
5408	2422 549 00232	Trimmer 78MHz 5JKH
5416	4822 157 11716	Bead 30Ω at 100MHz
5702	4822 157 11716	Bead 30Ω at 100MHz
5703	4822 157 11716	Bead 30Ω at 100MHz
5713	4822 157 11716	Bead 30Ω at 100MHz
5714	4822 157 11716	Bead 30Ω at 100MHz
5719	4822 157 11716	Bead 30Ω at 100MHz
5720	4822 157 11716	Bead 30Ω at 100MHz
5724	4822 157 11716	Bead 30Ω at 100MHz
5725	4822 157 11716	Bead 30Ω at 100MHz
5727	4822 157 11716	Bead 30Ω at 100MHz
5750	4822 157 11716	Bead 30Ω at 100MHz
5751	4822 157 11716	Bead 30Ω at 100MHz
5752	4822 157 11716	Bead 30Ω at 100MHz
5753	4822 157 11716	Bead 30Ω at 100MHz
5756	4822 157 11716	Bead 30Ω at 100MHz
5757	4822 157 11716	Bead 30Ω at 100MHz
5758	4822 157 11716	Bead 30Ω at 100MHz
5759	4822 157 11716	Bead 30Ω at 100MHz
5760	4822 157 11716	Bead 30Ω at 100MHz

5761	4822 157 11716	Bead 30Ω at 100MHz
5762	4822 157 11716	Bead 30Ω at 100MHz
5763	4822 157 11716	Bead 30Ω at 100MHz
5764	4822 157 11716	Bead 30Ω at 100MHz
5767	4822 157 11716	Bead 30Ω at 100MHz
5768	4822 157 11716	Bead 30Ω at 100MHz
5769	4822 157 11716	Bead 30Ω at 100MHz
5770	4822 157 11716	Bead 30Ω at 100MHz
5771	4822 157 11716	Bead 30Ω at 100MHz
5772	4822 157 11716	Bead 30Ω at 100MHz
5773	4822 157 11716	Bead 30Ω at 100MHz
5775	4822 157 11716	Bead 30Ω at 100MHz
5777	4822 157 11716	Bead 30Ω at 100MHz
5800	4822 157 11716	Bead 30Ω at 100MHz
5801	4822 157 11716	Bead 30Ω at 100MHz
5A00	2422 549 44197	Bead 220Ω at 100MHz
5A01	2422 549 44197	Bead 220Ω at 100MHz
5A02	2422 549 44197	Bead 220Ω at 100MHz
5A03	2422 549 44197	Bead 220Ω at 100MHz
5A06	2422 549 44197	Bead 220Ω at 100MHz
5A07	2422 549 44197	Bead 220Ω at 100MHz
5A19	4822 157 11828	22µH 20% 0805
5A38	2422 549 44197	Bead 220Ω at 100MHz
5E00	4822 156 21729	Bead 1kΩ 100MHz 0805
5E01	2422 549 42896	Bead 120Ω 100MHz
5E02	4822 156 21729	Bead 1kΩ 100MHz 0805
5E03	4822 156 21729	Bead 1kΩ 100MHz 0805
5E50	4822 157 11499	Bead 60Ω at 100MHz
5E51	2422 549 42896	Bead 120Ω 100MHz
5E52	2422 549 43062	Bead 600Ω at 100MHz
5E53	2422 536 00779	10µH 20%
5E54	4822 157 11499	Bead 60Ω at 100MHz
5E55	2422 549 43062	Bead 600Ω at 100MHz
5E58	2422 549 43062	Bead 600Ω at 100MHz
5I02	4822 156 21729	Bead 1kΩ 100MHz 0805
5I04	3198 018 90050	Bead 1kΩ at 100MHz
5I05	4822 157 11716	Bead 30Ω at 100MHz
5I06	4822 157 11716	Bead 30Ω at 100MHz
5I12	4822 157 11716	Bead 30Ω at 100MHz
5I13	4822 157 11716	Bead 30Ω at 100MHz
5I21	4822 157 11716	Bead 30Ω at 100MHz
5I22	4822 157 11716	Bead 30Ω at 100MHz
5I30	4822 157 11716	Bead 30Ω at 100MHz
5I31	4822 157 11716	Bead 30Ω at 100MHz
5I32	4822 157 11716	Bead 30Ω at 100MHz
5I33	4822 157 11716	Bead 30Ω at 100MHz
5I34	4822 157 11716	Bead 30Ω at 100MHz
5I35	4822 157 11716	Bead 30Ω at 100MHz
5I39	4822 157 11716	Bead 30Ω at 100MHz
5I40	4822 157 11716	Bead 30Ω at 100MHz
5I41	4822 157 11716	Bead 30Ω at 100MHz
5I42	4822 156 21729	Bead 1kΩ 100MHz 0805
5I45	4822 157 11716	Bead 30Ω at 100MHz
5I46	4822 157 11716	Bead 30Ω at 100MHz
5I47	4822 157 11716	Bead 30Ω at 100MHz
5L02	3198 018 54770	0.47µF 10% 0603
5L04	3198 018 54770	0.47µF 10% 0603
5L06	3198 018 54770	0.47µF 10% 0603
5L13	4822 156 21729	Bead 1kΩ 100MHz 0805
5L14	4822 156 21729	Bead 1kΩ 100MHz 0805
5L15	4822 156 21729	Bead 1kΩ 100MHz 0805
5L16	4822 157 11716	Bead 30Ω at 100MHz
5L17	4822 157 11716	Bead 30Ω at 100MHz
5L18	4822 157 11716	Bead 30Ω at 100MHz
5P51	4822 157 11716	Bead 30Ω at 100MHz
5T20	4822 157 11716	Bead 30Ω at 100MHz
5T22	4822 157 11716	Bead 30Ω at 100MHz
5T25	2422 535 94134	10µH 20% 0805
5U01	3104 308 20661	Transf. BD13118-02
5U02	2422 536 00779	10µH 20%
5U03	2422 549 44197	Bead 220Ω at 100MHz
5U04	2422 549 44197	Bead 220Ω at 100MHz
5U05	2422 536 00779	10µH 20%
5U06	2422 536 00779	10µH 20%
5Y00	2422 549 44197	Bead 220Ω at 100MHz
5Y01	2422 549 44197	Bead 220Ω at 100MHz
5Y02	2422 549 44197	Bead 220Ω at 100MHz
5Y03	2422 549 44197	Bead 220Ω at 100MHz
5Y06	2422 549 44197	Bead 220Ω at 100MHz
5Y07	2422 549 44197	Bead 220Ω at 100MHz
5Y09	4822 157 11716	Bead 30Ω at 100MHz
5Y11	2422 549 44197	Bead 220Ω at 100MHz
5Y12	2422 549 44197	Bead 220Ω at 100MHz
5Y14	2422 549 44197	Bead 220Ω at 100MHz
5Y15	2422 549 44197	Bead 220Ω at 100MHz
5Y16	2422 549 44197	Bead 220Ω at 100MHz
5Y17	2422 549 44197	Bead 220Ω at 100MHz
5Y18	2422 549 44197	Bead 220Ω at 100MHz
5Y20	2422 549 44197	Bead 220Ω at 100MHz
5Y21	4822 117 10353	150Ω 1% 0.1W
5Y22	4822 117 10353	150Ω 1% 0.1W
5Y23	2422 549 44197	Bead 220Ω at 100MHz
5Z01	2422 549 45325	Bead 67Ω at 100MHz
5Z02	2422 549 45325	Bead 67Ω at 100MHz
5Z03	2422 549 45325	Bead 67Ω at 100MHz
5Z04	2422 549 45325	Bead 67Ω at 100MHz
5Z05	2422 549 45325	Bead 67Ω at 100MHz

6001	4822 130 80622	BAT54
6003	4822 130 80622	BAT54
6004	4822 130 80622	BAT54
6005	4822 130 11422	PLVA2650A
6006	4822 130 11564	UDZ3.9B
6403	9340 552 30115	BA591
6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9322 129 41685	BZM55-C12
6508	4822 130 11551	UDZS10B
6701	4822 130 11397	BAS316
6702	4822 130 11397	BAS316
6703	4822 130 11397	BAS316
6705	4822 130 11397	BAS316
6710	4822 130 11397	BAS316
6711	4822 130 11397	BAS316
6712	4822 130 11397	BAS316
6713	4822 130 11397	BAS316
6714	4822 130 11397	BAS316
6715	4822 130 11397	BAS316
6716	4822 130 11397	BAS316
6717	4822 130 11397	BAS316
6718	4822 130 11397	BAS316
6719	9322 128 69685	S1D
6720	4822 130 11397	BAS316
6721	4822 130 11397	BAS316
6723	4822 130 11397	BAS316
6A00	4822 130 11551	UDZS10B
6A01	4822 130 11397	BAS316
6A02	9322 159 70685	MM3Z9V1
6E51	4822 130 11397	BAS316
6E52	4822 130 11397	BAS316
6E53	4822 130 11397	BAS316
6E54	4822 130 11397	BAS316
6E55	4822 130 11397	BAS316
6E56	4822 130 11397	BAS316
6I08	4822 130 11423	PLVA2656A
6I09	4822 130 11423	PLVA2656A
6I10	4822 130 11397	BAS316
6I11	4822 130 11397	BAS316
6I12	4822 130 11397	BAS316
6I13	4822 130 11397	BAS316
6I22	4822 130 11416	PDZ6.8B
6I23	4822 130 11416	PDZ6.8B
6I24	4822 130 11416	PDZ6.8B
6I25	4822 130 11416	PDZ6.8B
6I26	4822 130 11416	PDZ6.8B
6I27	4822 130 11416	PDZ6.8B
6I28	4822 130 11416	PDZ6.8B
6I29	4822 130 11416	PDZ6.8B
6I30	4822 130 11416	PDZ6.8B
6I31	4822 130 11416	PDZ6.8B
6I32	4822 130 11416	PDZ6.8B
6I33	4822 130 11416	PDZ6.8B
6I35	4822 130 11416	PDZ6.8B
6I36	4822 130 11416	PDZ6.8B
6I37	4822 130 11416	PDZ6.8B
6I38	4822 130 11416	PDZ6.8B
6I39	4822 130 11416	PDZ6.8B
6I40	4822 130 11416	PDZ6.8B
6I41	4822 130 11416	PDZ6.8B
6I42	4822 130 11416	PDZ6.8B
6I43	4822 130 11416	PDZ6.8B
6I44	4822 130 11416	PDZ6.8B
6I45	4822 130 11416	PDZ6.8B
6I46	4822 130 11416	PDZ6.8B
6I47	4822 130 11416	PDZ6.8B
6I48	4822 130 11416	PDZ6.8B
6I49	9322 129 41685	BZM55-C12
6I50	4822 130 11416	PDZ6.8B
6I51	4822 130 11416	PDZ6.8B
6I52	4822 130 11416	PDZ6.8B
6I53	4822 130 11416	PDZ6.8B
6I54	4822 130 11416	PDZ6.8B
6I55	4822 130 11416	PDZ6.8B
6I56	4822 130 11416	PDZ6.8B
6I61	4822 130 11416	PDZ6.8B
6I62	4822 130 11416	PDZ6.8B
6I63	4822 130 11397	BAS316
6I64	4822 130 11397	BAS316
6I65	4822 130 11397	BAS316
6I66	4822 130 11397	BAS316
6I68	4822 130 11416	PDZ6.8B
6I69	4822 130 11416	PDZ6.8B
6I70	4822 130 11416	PDZ6.8B
6I75	4822 130 11416	PDZ6.8B
6I77	4822 130 11416	PDZ6.8B
6I90	4822 130 11416	PDZ6.8B
6I91	4822 130 11416	PDZ6.8B
6I92	4822 130 11416	PDZ6.8B
6I93	4822 130 11416	PDZ6.8B
6I99	4822 130 11423	PLVA2656A
6IA0	9322 129 41685	BZM55-C12
6IA7	4822 130 11397	BAS316
6T01	4822 130 11397	BAS316
6T03	4822 130 11397	BAS316
6T08	9340 548 71115	PDZ33B
6U01	4822 130 11397	BAS316
6U03	4822 130 11397	BAS316
6U04	4822 130 11397	BAS316
6U05	9322 129 41685	BZM55-C12
6U06	9322 203 37685	BZG05C3V9
6U07	4822 130 11416	PDZ6.8B
6U08	4822 130 80622	BAT54
6U09	4822 130 80622	BAT54
6U10	4822 130 11522	UDZ15B
6U11	4822 130 11397	BAS316
6U12	9340 548 52115	PDZ5.1B
6U13	9340 548 58115	PDZ9.1B
6U16	9340 548 52115	PDZ5.1B
6U17	4822 130 11416	PDZ6.8B

7001	9352 684 81557	SAA5801H/015
7002	3198 010 42320	BC857BW
7003	3198 010 42310	BC847BW
7004	3198 010 42310	BC847BW
7005	9322 172 45668	LF33ABDT
7006		For SW see item 0601
7007	9322 200 55668	IS41LV16100-50K
7008	3198 010 42310	BC847BW
7009	3198 010 42310	BC847BW
7010	3198 010 42320	BC857BW
7011	9322 130 41668	M24C64-WMN6
7012	9322 199 93668	M29W400DT-55N6
7013	3198 010 42310	BC847BW
7014	3198 010 42320	BC857BW
7017	9340 310 30215	PDTC144ET
7018	9352 115 40118	74LVC245APW
7019	9352 115 40118	74LVC245APW
7022	3198 010 42320	BC857BW
7320	3198 010 42310	BC847BW
7322	3198 010 42310	BC847BW
7323	9352 625 24518	TDA9321H/N2
7402	3198 010 42310	BC847BW
7403	3198 010 42310	BC847BW
7407	3198 010 42320	BC857BW
7410	3198 010 42310	BC847BW
7411	3198 010 42310	BC847BW
7414	3198 010 42310	BC847BW
7415	3198 010 42310	BC847BW
7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW
7703	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 70400	74LVC1G14GW
7707	3198 010 42310	BC847BW
7708	3198 010 42310	BC847BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711		For SW see item 0605
7712	9352 190 20118	74LVC573APW
7713	9352 688 09557	SAA4978H/V204
7714	9965 000 02179	MS81V04160-25TB
7717	4822 209 73852	PMBT2369
7719	9322 206 19672	MSM56V16160F-7T3-FG
7720	9322 211 71702	T6TX5AFG-0001
7752	9322 204 76671	T6TU5XBG-0001
7753	9322 206 19672	MSM56V16160F-7T3-FG
7760	9352 730 86557	SAA4998H/V1
7772	9322 170 14668	LF15ABDT
7773	9322 179 78668	LF18ABDT
7774	9322 142 88668	LF25CDT
7775	3198 010 42320	BC857BW
7776	3198 010 42320	BC857BW
7777	3198 010 42320	BC857BW
7A00	4822 209 30095	LM833D
7A01	3198 010 42310	BC847BW
7A02	9322 196 03702	MSP3411G-QI-B8V3
7A03	4822 209 30095	LM833D
7A04	4822 130 60373	BC856B
7A07	9322 183 05668	TS482ID

7A08	9340 425 20115	BC847BS
7A09	4822 130 60373	BC856B
7A11	9322 199 16668	M74HC590T
7A12	9322 199 16668	M74HC590T
7A13	3198 010 42310	BC847BW
7A14	9351 869 90118	74HCT573PW
7A15	9351 869 90118	74HCT573PW
7A16	9322 208 98668	M68AF031AM70N6
7A31	9340 425 20115	BC847BS
7E01	9322 142 88668	LF25CDT
7E02		For SW see item 0602
7E03	9352 687 21165	74LVC1G126GW
7E04	9352 687 20125	74LVC1G125GW
7E05	9322 170 14668	LF15ABDT
7E10	9352 759 98118	PCA9515ADP
7E12	9340 425 20115	BC847BS
7E23	9322 181 72671	AD9883AKST-110
7E24	9322 205 36668	AD9283BRSZ-50
7E25	3198 010 42320	BC857BW
7E26	3198 010 42320	BC857BW
7E27	3198 010 42320	BC857BW
7I01	9340 425 20115	BC847BS
7I02	9340 425 20115	BC847BS
7I03	9340 425 20115	BC847BS
7I04	3198 010 42310	BC847BW
7I05	9340 425 30115	BC847BPN
7I07	4822 130 60142	BC869
7I09	3198 010 42310	BC847BW
7I10	9352 759 98118	PCA9515ADP
7I12	9351 869 40118	74HC4053PW
7I18	9322 183 61682	SII907BCQ52
7I19		For SW see item 0603
7I20	9351 869 40118	74HC4053PW
7I21	9340 425 30115	BC847BPN
7I22	3198 010 42310	BC847BW
7I23	9340 425 20115	BC847BS
7I27	3198 010 42320	BC857BW
7I29	3198 010 42320	BC857BW
7I31	3198 010 42320	BC857BW
7I32	9351 869 40118	74HC4053PW
7I35	3198 010 42310	BC847BW
7I36	3198 010 42310	BC847BW
7I37	3198 010 42320	BC857BW
7I38	3198 010 42310	BC847BW
7I40	3198 010 42310	BC847BW
7I44	9340 425 20115	BC847BS
7I45	9322 192 16685	TS2431AI
7I46	3198 010 42310	BC847BW
7I49	9340 310 30215	PDTC144ET
7I50	9340 425 30115	BC847BPN
7I51	9340 560 35235	BSH112
7I52	9340 560 35235	BSH112
7I53	9340 425 30115	BC847BPN
7I55	4822 209 16095	BA7657F
7I56	3198 010 42310	BC847BW
7I57	3198 010 42310	BC847BW
7I58	3198 010 42310	BC847BW
7I62	3198 010 42310	BC847BW
7I65	4822 209 17398	LD1117DT33
7L01	9322 181 72671	AD9883AKST-110
7L02	4822 209 17398	LD1117DT33
7P56	4822 209 17345	M62320FP
7U01	4822 130 60373	BC856B
7U02	4822 130 60373	BC856B
7U03	9340 563 82518	SI4410DY
7U04	9340 563 82518	SI4410DY
7U05	3198 010 42320	BC857BW
7U06	9340 425 20115	BC847BS
7U07	9340 425 30115	BC847BPN
7U08	4822 130 42804	BC817-25
7U09	4822 130 42804	BC817-25
7U10	3198 010 42310	BC847BW
7U11	3198 010 42310	BC847BW
7U12	3198 010 42310	BC847BW
7U13	9340 425 30115	BC847BPN
7V01	9322 217 35671	EP1C12F256C8N
7V03	9322 206 19672	MSM56V16160F-7T3-FG
7V04	9340 425 20115	BC847BS
7Y01	9340 310 30215	PDTC144ET
7Y02	3198 010 42320	BC857BW
7Y03	9340 310 30215	PDTC144ET
7Y04	9340 310 30215	PDTC144ET

PDP Audio Panel [C]

Various

1735	4822 267 10918	Connector 3p
1736	2422 025 10768	Connector 3p m
1M02	4822 267 10618	Connector 7p
1M06	2422 025 11244	Connector 7p m
1M52	2422 025 10769	Connector 9p m

⊣⊢

2700	4822 126 14247	1.5nF 50V 0603
2701	4822 126 14249	560pF 10% 50V 0603
2703	2020 552 96683	220nF 10% 50V
2704	4822 124 11767	470µF 20% 25V
2705	4822 126 14249	560pF 10% 50V 0603
2706	5322 126 11579	3.3nF 10% 63V
2707	2222 580 15649	100nF 10% 50V 0805
2709	2020 552 96683	220nF 10% 50V
2710	2020 552 96683	220nF 10% 50V
2711	2022 552 05679	1µF 10% 16V 0805
2712	4822 126 14583	470nF 10% 16V 0805
2713	4822 126 13193	4.7nF 10% 63V
2715	4822 121 51252	470nF 5% 63V
2716	3198 017 31530	15nF 20% 50V 0603
2717	2022 552 05679	1µF 10% 16V 0805
2718	2222 580 15649	100nF 10% 50V 0805
2719	4822 126 14583	470nF 10% 16V 0805
2720	2020 021 91431	22µF 20% 100V
2721	2222 580 15649	100nF 10% 50V 0805
2722	4822 126 14583	470nF 10% 16V 0805
2723	2022 552 05679	1µF 10% 16V 0805
2726	4822 126 13193	4.7nF 10% 63V
2727	4822 126 14249	560pF 10% 50V 0603
2731	4822 126 14249	560pF 10% 50V 0603
2732	4822 126 14583	470nF 10% 16V 0805
2736	4822 121 51252	470nF 5% 63V
2737	3198 017 31530	15nF 20% 50V 0603
2739	2222 580 15649	100nF 10% 50V 0805
2741	4822 126 13883	220pF 5% 50V
2743	3198 016 31020	1nF 25V 0603
2744	2222 580 15649	100nF 10% 50V 0805
2745	2020 552 96683	220nF 10% 50V
2746	4822 124 11767	470µF 20% 25V
2747	2022 552 05679	1µF 10% 16V 0805
2748	4822 126 14247	1.5nF 50V 0603
2749	5322 126 11579	3.3nF 10% 63V
2751	4822 124 40433	47µF 20% 25V
2754	2020 021 91431	22µF 20% 100V
2770	3198 017 41050	1µF 10V 0603
2776	2020 021 91431	22µF 20% 100V
2780	4822 126 14583	470nF 10% 16V 0805
2789	4822 126 14583	470nF 10% 16V 0805
2790	2222 580 15649	100nF 10% 50V 0805
2791	4822 126 13879	220nF +80-20% 16V

–WW–

3700	4822 051 30561	560Ω 5% 0.062W
3701	4822 051 30479	47Ω 5% 0.062W
3702	3198 021 38220	8.2kΩ 5% 0.062W 0603
3703	3198 021 38220	8.2kΩ 5% 0.062W 0603
3704	4822 117 13632	100kΩ 1% 0603 0.62W
3705	4822 051 30222	2.2kΩ 5% 0.062W
3706	4822 051 30392	3.9Ω 5% 0.063W 0603
3707	4822 051 30393	39kΩ 5% 0.062W
3708	4822 051 30479	47Ω 5% 0.062W
3709	4822 051 30472	4.7Ω 5% 0.062W
3710	4822 051 30393	39kΩ 5% 0.062W
3711	2322 762 60568	5.6Ω 5% 5% 2512
3712	4822 051 30472	4.7Ω 5% 0.062W
3713	4822 051 30332	3.3Ω 5% 0.062W
3714	4822 051 30392	3.9Ω 5% 0.063W 0603
3715	2322 762 60568	5.6Ω 5% 5% 2512
3716	4822 117 13632	100kΩ 1% 0603 0.62W
3717	4822 051 30222	2.2kΩ 5% 0.062W
3718	4822 051 30561	560Ω 5% 0.062W
3719	4822 051 30124	120kΩ 5% 0.062W
3720	4822 051 30479	47Ω 5% 0.062W
3721	4822 051 30471	47Ω 5% 0.062W
3722	4822 051 30124	120kΩ 5% 0.062W
3723	4822 051 30471	47Ω 5% 0.062W
3724	4822 051 30102	1kΩ 5% 0.062W
3725	4822 117 12925	47kΩ 1% 0.063W 0603
3726	4822 051 30153	15kΩ 5% 0.062W
3727	4822 051 30103	10kΩ 5% 0.062W
3728	4822 051 30153	15kΩ 5% 0.062W
3729	4822 117 12925	47kΩ 1% 0.063W 0603
3730	4822 051 30223	22kΩ 5% 0.062W
3731	4822 051 30102	1kΩ 5% 0.062W
3732	4822 051 30223	22kΩ 5% 0.062W
3733	4822 051 30562	5.6kΩ 5% 0.063W 0603
3734	4822 051 30223	22kΩ 5% 0.062W
3735	4822 117 12889	270kΩ 1% 0.063W 0603
3736	4822 117 12925	47kΩ 1% 0.063W 0603
3737	4822 117 12925	47kΩ 1% 0.063W 0603
3738	4822 117 13632	100kΩ 1% 0603 0.62W
3740	4822 117 13632	100kΩ 1% 0603 0.62W
3742	4822 117 13632	100kΩ 1% 0603 0.62W
3746	4822 051 30222	2.2kΩ 5% 0.062W
3748	4822 117 13632	100kΩ 1% 0603 0.62W
3751	4822 051 30222	2.2kΩ 5% 0.062W
3752	4822 051 30103	10kΩ 5% 0.062W
3760	4822 051 30223	22kΩ 5% 0.062W
3764	4822 117 13632	100kΩ 1% 0603 0.62W
3765	4822 117 13632	100kΩ 1% 0603 0.62W
3777	4822 051 30102	1kΩ 5% 0.062W
3778	4822 051 30479	47Ω 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
9710	4822 051 20008	Jumper 0805
9711	4822 051 20008	Jumper 0805
9712	4822 051 20008	Jumper 0805
9713	4822 051 20008	Jumper 0805
9748	4822 051 20008	Jumper 0805
9757	4822 051 20008	Jumper 0805
9758	4822 051 20008	Jumper 0805
9759	4822 051 20008	Jumper 0805
9760	4822 051 20008	Jumper 0805
9761	4822 051 20008	Jumper 0805
9762	4822 051 20008	Jumper 0805
9763	4822 051 20008	Jumper 0805
9764	4822 051 20008	Jumper 0805
9765	4822 051 20008	Jumper 0805
9766	4822 051 20008	Jumper 0805
9768	4822 051 20008	Jumper 0805
9770	4822 051 20008	Jumper 0805
9790	4822 051 20008	Jumper 0805
9795	4822 051 20008	Jumper 0805
9796	4822 051 20008	Jumper 0805
9806	4822 051 20008	Jumper 0805
9807	4822 051 20008	Jumper 0805
9808	4822 051 20008	Jumper 0805

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5700	2422 536 00942	33µH 20%
5701	4822 157 11716	Bead 30Ω at 100MHz
5702	2422 536 00942	33µH 20%
5705	4822 157 11411	Bead 80Ω at 100MHz
5708	4822 157 11411	Bead 80Ω at 100MHz

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6700	4822 130 11522	UDZ15B
6702	9322 150 18685	BZX384-C47
6703	4822 130 10838	UDZ3.3B
6704	4822 130 11551	UDZS10B
6705	4822 130 11551	UDZS10B

⊘▭

7700	9322 202 89668	LM393P
7701	9352 729 65112	TDA8925ST/N1
7702	3198 010 42310	BC847BW
7705	3198 010 42310	BC847BW
7706	3198 010 42310	BC847BW
7707	3198 010 42310	BC847BW
7708	3198 010 42320	BC857BW
7709	3198 010 42310	BC847BW
7710	3198 010 42310	BC847BW
7711	3198 010 42320	BC857BW
7712	3198 010 42310	BC847BW
7713	3198 010 42310	BC847BW
7715	3198 010 42310	BC847BW
7716	3198 010 42310	BC847BW
7717	3198 010 42310	BC847BW
7720	3198 010 42310	BC847BW

Side I/O Panel [D]

Various

0206	3104 308 12561	Side I/O bracket
1001	2422 026 05133	Connector SVHS 4p f
1002	4822 267 10975	Connector 3p
1010	4822 267 31014	Socket head phone
1016	3104 328 28881	Side I/O assy
1M36	2422 025 17179	Connector 11p m

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2003	2022 552 05679	1µF 10% 16V 0805
2004	3198 016 36810	680pF 25V 0603
2005	2020 552 94427	100pF 5% 50V
2006	3198 016 36810	680pF 25V 0603
2007	2020 552 94427	100pF 5% 50V
2008	2238 916 15641	22nF 10% 25V 0603
2009	5322 126 11583	10nF 10% 50V 0603
2010	2238 916 15641	22nF 10% 25V 0603
2011	5322 126 11583	10nF 10% 50V 0603

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3000	4822 051 30759	75Ω 5% 0.062W
3004	4822 051 30759	75Ω 5% 0.062W
3008	4822 051 30222	2.2kΩ 5% 0.062W
3009	4822 051 30102	1kΩ 5% 0.062W
3010	4822 051 30333	33kΩ 5% 0.062W
3011	4822 051 30392	3.9Ω 5% 0.063W 0603
3012	4822 051 30102	1kΩ 5% 0.062W
3013	4822 051 30333	33kΩ 5% 0.062W
3016	4822 051 30103	10kΩ 5% 0.062W
3020	4822 051 30103	10kΩ 5% 0.062W
9004	4822 051 30008	Jumper 0603
9005	4822 051 30008	Jumper 0603
9006	4822 051 30008	Jumper 0603
9007	4822 051 30008	Jumper 0603
9008	4822 051 30008	Jumper 0603
9009	4822 051 30008	Jumper 0603
9010	4822 051 30008	Jumper 0603
9011	4822 051 30008	Jumper 0603

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6000	4822 130 11416	PDZ6.8B
6001	4822 130 11416	PDZ6.8B
6002	4822 130 11416	PDZ6.8B
6003	4822 130 11416	PDZ6.8B
6004	4822 130 11416	PDZ6.8B
6005	4822 130 11416	PDZ6.8B
6006	4822 130 11416	PDZ6.8B
6007	4822 130 11416	PDZ6.8B
6008	4822 130 11416	PDZ6.8B
6009	4822 130 11416	PDZ6.8B
6010	4822 130 11416	PDZ6.8B
6011	4822 130 11416	PDZ6.8B

Top Control Assy [E]

Various

0049	3104 308 11601	Mains knob
0054	3104 308 11591	Mains knob frame
0345	2422 025 16544	Connector 6p m
1701	4822 276 13775	Switch
1702	4822 276 13775	Switch
1703	4822 276 13775	Switch
1704	4822 276 13775	Switch
1705	4822 276 13775	Switch
1710	4822 276 14007	Switch 2P 0.1A 12V
8345	3104 311 06941	Cable 6P/680/6P

-ww-

3008	4822 117 10845	620Ω 1% 0.1W
3010	4822 117 11534	1.1kΩ 1% 0.1W
3011	4822 117 11951	2kΩ 1% 0.1W
3013	4822 117 13528	200Ω 1% 0.125W 0805
3014	3198 031 03910	390Ω 1% 0402
3017	4822 051 30339	33Ω 5% 0.062W
3018	4822 051 30339	33Ω 5% 0.062W
3019	4822 051 30339	33Ω 5% 0.062W
3020	4822 051 30339	33Ω 5% 0.062W
3021	4822 051 30339	33Ω 5% 0.062W
3022	4822 051 30339	33Ω 5% 0.062W
3023	4822 051 30339	33Ω 5% 0.062W
3024	4822 051 30339	33Ω 5% 0.062W
3025	4822 051 30339	33Ω 5% 0.062W
3026	4822 051 30339	33Ω 5% 0.062W
3027	4822 051 30339	33Ω 5% 0.062W
3028	4822 051 30339	33Ω 5% 0.062W
3999	4822 117 13602	2.2kΩ 5% 0.01W 0402
9000	4822 117 13605	Jumper 0402

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6001	9322 198 19685	SML512BC2T
6002	9322 198 19685	SML512BC2T
6003	9322 198 19685	SML512BC2T
6004	9322 198 19685	SML512BC2T
6005	9322 198 19685	SML512BC2T
6006	9322 198 19685	SML512BC2T
6007	9322 198 19685	SML512BC2T
6008	9322 198 19685	SML512BC2T
6009	9322 198 19685	SML512BC2T
6010	9322 198 19685	SML512BC2T
6011	9322 198 19685	SML512BC2T
6012	9322 198 19685	SML512BC2T

SCART 3 [H]

Various

1003	2422 025 14911	Socket Euro 21p f
1M07	4822 267 10637	Connector 5p

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2500	2022 552 05679	1µF 10% 16V 0805
2501	2020 552 94427	100pF 5% 50V
2502	2022 552 05679	1µF 10% 16V 0805
2503	2020 552 94427	100pF 5% 50V
2504	2022 552 05679	1µF 10% 16V 0805
2505	2022 552 05679	1µF 10% 16V 0805
2506	2238 586 59812	100nF 20% 50V 0603
2507	5322 126 11578	1nF 10% 50V 0603
2508	2022 552 05679	1µF 10% 16V 0805
2509	2238 586 59812	100nF 20% 50V 0603
2510	4822 126 14241	330pF 0603 50V
2511	2238 586 59812	100nF 20% 50V 0603
2512	2238 586 59812	100nF 20% 50V 0603
2513	2238 586 59812	100nF 20% 50V 0603
2515	2022 552 05679	1µF 10% 16V 0805
2516	2022 552 05679	1µF 10% 16V 0805
2517	2022 552 05679	1µF 10% 16V 0805

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3500	4822 051 30101	100Ω 5% 0.062W
3501	4822 051 30101	100Ω 5% 0.062W
3502	4822 051 30223	22kΩ 5% 0.062W
3503	4822 051 30101	100Ω 5% 0.062W
3504	4822 051 30101	100Ω 5% 0.062W
3505	4822 051 30223	22kΩ 5% 0.062W
3506	4822 051 30759	75Ω 5% 0.062W
3507	4822 051 30759	75Ω 5% 0.062W
3508	4822 051 30759	75Ω 5% 0.062W
3509	4822 051 30101	100Ω 5% 0.062W
3510	4822 051 30759	75Ω 5% 0.062W
3511	4822 051 30479	47Ω 5% 0.062W
3512	4822 051 30479	47Ω 5% 0.062W
3513	4822 051 30479	47Ω 5% 0.062W
3514	4822 051 30479	47Ω 5% 0.062W
3515	4822 051 30479	47Ω 5% 0.062W
3516	4822 051 30479	47Ω 5% 0.062W
3517	4822 117 12925	47kΩ 1% 0.063W 0603
3522	4822 051 30272	2.7kΩ 5% 0.062W
3523	4822 051 30223	22kΩ 5% 0.062W
3524	4822 051 30479	47Ω 5% 0.062W
3525	4822 051 30102	1kΩ 5% 0.062W
3526	5322 117 13056	8.2kΩ 1% 0.063W 0603
3527	4822 051 30683	68kΩ 5% 0.062W
3528	4822 051 30223	22kΩ 5% 0.062W
3529	4822 051 30102	1kΩ 5% 0.062W
3535	4822 051 30479	47Ω 5% 0.062W
3536	4822 051 30103	10kΩ 5% 0.062W
3543	4822 051 30759	75Ω 5% 0.062W
3599	4822 051 30102	1kΩ 5% 0.062W
3999	4822 051 30102	1kΩ 5% 0.062W
9502	4822 051 30008	Jumper 0603
9508	4822 051 30008	Jumper 0603
9509	3198 036 90010	Wire 0.58mm
9510	3198 036 90010	Wire 0.58mm
9511	3198 036 90010	Wire 0.58mm
9512	3198 036 90010	Wire 0.58mm
9513	3198 036 90010	Wire 0.58mm
9514	3198 036 90010	Wire 0.58mm
9515	3198 036 90010	Wire 0.58mm
9521	4822 051 30008	Jumper 0603
9523	3198 036 90010	Wire 0.58mm
9524	4822 051 30008	Jumper 0603
9525	3198 036 90010	Wire 0.58mm
9526	3198 036 90010	Wire 0.58mm

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6500	4822 130 11416	PDZ6.8B
6501	4822 130 11416	PDZ6.8B
6502	4822 130 11416	PDZ6.8B
6503	4822 130 11416	PDZ6.8B
6504	4822 130 11397	BAS316
6505	4822 130 11416	PDZ6.8B
6506	4822 130 11416	PDZ6.8B
6507	9340 548 61115	PDZ12B
6508	4822 130 11551	UDZS10B

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7501	3198 010 42310	BC847BW
7502	3198 010 42310	BC847BW
7515	9351 869 40118	74HC4053PW
7516	9351 869 40118	74HC4053PW

LED Panel [J]

Various

0163	3122 124 36081	Day light filter
0345	2422 025 16961	Connector 6p m SMD
0345	2422 025 18741	Connector 6p m
1040	9322 206 81667	TSOP34836YA1
1M01	2422 025 17103	Connector 3p m SMD
1M01	2422 025 18738	Connector 3p m
1M20	2422 025 17441	Connector 12p m
1M20	2422 025 18736	Connector 12p m

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2030	4822 124 23002	10µF 16V
2040	4822 124 12095	100µF 20% 16V
2060	5322 124 41945	22µF 20% 35V
2070	4822 126 14583	470nF 10% 16V 0805
2071	4822 124 23002	10µF 16V

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3011	4822 117 13545	100Ω 1% 0402
3020	4822 117 13606	10kΩ 5% 0.01W 0402
3030	3198 031 04720	4.7kΩ 5% 0402
3031	4822 117 11297	100kΩ 5% 0.1W
3031	4822 117 12889	270kΩ 1% 0.063W 0603
3031	4822 117 13632	100kΩ 1% 0603 0.62W
3032	2322 705 70184	180Ω 5% 0402
3033	4822 051 30102	1kΩ 5% 0.062W
3033	4822 117 13548	1kΩ 5% 0402
3034	4822 117 13548	1kΩ 5% 0402
3035	3198 031 04720	4.7kΩ 5% 0402
3036	3198 031 02280	2.2Ω 5% 0.1W 0402
3037	3198 031 02280	2.2Ω 5% 0.1W 0402
3040	4822 117 13597	330Ω 5% 0402 0.01W
3041	4822 117 13606	10kΩ 5% 0.01W 0402
3042	3198 031 06820	6.8kΩ 5% 0.01W 0402
3051	4822 117 13597	330Ω 5% 0402 0.01W
3060	4822 117 13606	10kΩ 5% 0.01W 0402
3061	4822 051 30331	330Ω 5% 0.062W
3062	4822 117 11373	100Ω 1% 0805
3063	4822 117 13606	10kΩ 5% 0.01W 0402
3064	4822 117 11373	100Ω 1% 0805
3070	2322 705 70475	4.7MΩ 5% 0402
3071	2322 705 70475	4.7MΩ 5% 0402
3072	4822 117 13548	1kΩ 5% 0402
3073	3198 031 03320	3.3kΩ 5% 0402
3074	4822 117 13606	10kΩ 5% 0.01W 0402
3075	3198 031 04720	4.7kΩ 5% 0402
3076	3198 031 03320	3.3kΩ 5% 0402
3077	3198 031 03320	3.3kΩ 5% 0402
3078	3198 031 03320	3.3kΩ 5% 0402
3079	3198 031 03320	3.3kΩ 5% 0402
3091	4822 117 13606	10kΩ 5% 0.01W 0402
3093	4822 117 13606	10kΩ 5% 0.01W 0402
3096	4822 117 13606	10kΩ 5% 0.01W 0402
3999	3198 031 04720	4.7kΩ 5% 0402
9010	4822 117 13605	Jumper 0402
9012	4822 117 13605	Jumper 0402
9013	4822 117 13605	Jumper 0402
9014	4822 117 13605	Jumper 0402
9015	4822 117 13605	Jumper 0402
9016	4822 117 13605	Jumper 0402
9017	4822 117 13605	Jumper 0402
9019	4822 117 13605	Jumper 0402
9022	4822 051 30008	Jumper 0603
9024	4822 051 30008	Jumper 0603
9026	4822 117 13605	Jumper 0402
9027	4822 117 13605	Jumper 0402
9040	4822 117 13605	Jumper 0402
9041	4822 117 13605	Jumper 0402
9042	4822 117 13605	Jumper 0402
9043	4822 117 13605	Jumper 0402
9044	4822 117 13605	Jumper 0402
9050	4822 117 13605	Jumper 0402
9060	4822 117 13605	Jumper 0402
9081	4822 117 13605	Jumper 0402
9082	4822 117 13605	Jumper 0402

6030	4822 130 11397	BAS316
6031	4822 130 11397	BAS316
6051	4822 130 11395	TLMH3100
6051	4822 130 83915	TLMV3100
6060	9322 208 45685	SML512BC4TL
6061	4822 130 11397	BAS316
6070	9322 140 63685	TEMD5000

7030	3198 010 42320	BC857BW
7031	5322 130 62804	BCP53
7032	3198 010 42310	BC847BW
7060	3198 010 42310	BC847BW
7061	3198 010 42310	BC847BW
7070	9322 192 63668	LM358P

11. Revision List

Manual xxxx xxx xxxx.0

- First release.